CE 60-3 GSM

INSTALLER MANUAL

(VERSION 4.2)

SOFTWARE MANUAL: only on CD

CE

This device meets the R&TTE requirements (Europe Union).

BEFORE INSTALLING THE SYSTEM PLEASE READ CAREFULLY ALL PARTS OF THIS MANUAL AND KEEP IN A SAFE PLACE THIS MANUAL FOR FUTURE REFERENCE.

INSTALLATION OF THE PRODUCT MUST BE DONE BY QUALIFIED TECHNICIAN. DUE TO THE ELECTRICAL CONNECTIONS OF PARTS WITH POLARITIES, THERE IS RISK OF ELECTRIC SHOCK.
THE INSTALLER MUST FOLLOW THE DIRECTIONS AS INDICATED.

SAFETY TIPS AND MAITENANCE

BEFORE TURING ON THE CONTROL PANEL, MAKE SURE THE POWER LINE IS SUITABLE AS INDICATED IN THIS MANUAL.

THE ELECTRICAL SYSTEM USED TO CONNECT THE CONTROL PANEL NEEDS TO HAVE A BIPOLAR BREAKER SWITCH THAT IS EASILY ACCESSIBLE.

DO NOT INSTALL IN HUMID, HOT ENVIRONMENTS OR CLOSE TO BATHTUBS, SINKS, ETC.

COMMUNICATION BETWEEN THE VARIOUS COMPONENTS OF THE SYSTEM ARE THOUGH RADIOFREQUENCY.
BEFORE FINAL INSTALLATION, BE SURE THAT PANEL COMMUNICATES CORRECTLY WITH ALL THE DEVICES. COULD HAPPEN THAT THE UNIT DOES NOT RECEIVE SIGNALS FROM SOME SENSOR. THIS IS DUE TO THE ENVIRONMENT IN WHICH THE SYSTEM OPERATES: REINFORCED CONCRETE WALLS, METAL BOXES, METAL SHELVES, ETC. MAY CAUSE PARTICULAR CONDITIONS OF REFRACTION OR REDUCTION OF SIGNALS (AS THE CONNECTION LOST OF MOBILE PHONE NETWORK).
TO AVOID THESE PROBLEMS AND ALWAYS GET MAXIMUM PERFORMANCE FROM YOUR SYSTEM, REMEMBER TO ALWAYS RUN SOME PRELIMINARY TESTS ON THE POSITIONING, IN ORDER TO DETERMINE THE EFFECTTIVENESS OF THE RADIO TRANSMISSIONS.

THE COMPANY SHALL NOT BE LIABLE FOR ANY IMPROPER USE OF THE PRODUCT, INCORRECT INSTALLATION OR FAILURE TO COMPLY WITH INSTURCTIONS OF THIS MANUAL AND THE LAW REGARDING ELECTRICAL SYSTEMS.

Index

1. TECHNICAL FEATURES 5
2. INSTALLING THE CONTROL PANEL 6
2.1. Choice of the mounting place 6
2.2. Wall mounting 6
3. DIAGRAM FOR CONTROL PANEL WIRING 10
3.1. Terminal blocks 10
3.2. DIP-Switch 11
3.3. JP1 and JP2 – EXTERNAL and INTERNAL TAMPER 12
3.4. HOW TO OPEN THE COVER FOR MAINTENANCE 12
3.5. JP3 - RELAY AUX 12
3.6. JP4 – INTERNAL SIREN POWER 13
3.7. INT1 – EMERGENCY SWITCH 13
3.8. CN14 – TEMPERATURE SENSOR 13
3.9. LED connection for system status 13
3.10. CN6 (GSM Module) – ANTI-JAMMING (GSM anti-blinding protection) 14
4. ACTIVATE INSTALLER MENU 15
4.1. Installer menu 15
5. DELETE MEMORY 16
6. LEARNING ACTIVATORS 17
6.1. Sirens and radio voice synthesis 18
7. LEARNING WIRELESS ZONES 19
7.1. Learning by “tamper” 20
7.2. Learning by “any radio code” 20
7.3. Learning siren tamper (only for SIRR-A/B v2) 21
8. RELAY AUX PROGRAMMING 22
9. FUNCTIONS 24
9.1. Clock Set up 24
9.2. Power line failure minutes 24
9.3. Dialler Security Code 24
9.4. Learning Activators 24
9.5. Siren test 24
9.6. Learning Radio Zones 25
9.7. Programming Zone 25
9.8. Programming ALERT 25
9.9. Exit Time (seconds) 25
9.10. Entry Time (seconds) 25
9.11. Pre-alarm time in Seconds 25
9.12. Outdoor Ringtone 26

9.13. Programming Vocal Messages 26
9.14. Beeps at Arming 26
9.15. Radio Sabotage 26
9.16. Door Control 27
9.17. Sensors Supervision 27
9.18. Number of Vocal Calls 27
9.19. AUX Relay Association 27
9.20. Radio Saturation 27
9.21. Sensors Test 28
9.22. GSM Test 28
9.23. Test GPRS Contact ID 28
9.24. Clear Memory 29
9.25. End Programming 29
10. PROGRAMMING GSM DIALLER 30
10.1. Programming telephone numbers 30
10.2. SMS PIN Code 31
10.3. Add telephone number to the control panel 31
10.4. Public emergency number 32
10.5. Deleting phone numbers 32
10.6. SIM credit request 32
10.7. Setup SIM expiry alert 32
10.8. Programming SIM credit request 33
11. VOCAL MENU 33
12. POWER ALERTS 34
12.1. Sensor Low Battery 34
12.2. Control Panel Low battery 34
12.3. No Network 34
13. OPEN DOOR ALERT 34
14. CONTACT ID 35
15. SATURATION RADIO TEST 36
16. ELETTRIC DIAGRAM 37
16.1. Main Diagram 37
16.2. Wired Generic sensors 38

1. TECHNICAL FEATURES

RADIO ZONES	60 wireless zones with LCD indication
WIRED ZONES	3 wired inputs NC *
TAMPER	1 tamper wired input (24 h/24) **
AREAS	2 + 1 areas with ALERT functions
RADIO CODE	48 bits
WORKING FREQUENCY	433,92 MHz (with anti-jamming)
RANGE	100 m (open field)
ARMING	Remote control, keypad and transponder key (max 16 devices), mechanical key, SMS, vocal menu
EVENT LOG	100 alarm events log with identification of the detector, arming/disarming and SMS sending
SIGNALLING	Internal high-power magnetodinamic siren, ALERT function, warning tones
WIRED OUTPUTS TO CONTROL EXTERNAL DEVICES	1 Relay 1 Output +12 V⎓ (drop down in alarm) 1 Output +12 V⎓ (raise up in alarm)
OUTPUTS TO POWER EXTERNAL DEVICES	1 Output +12 V⎓ for sirens/phone diallers 1 programmable Relay AUX
ALARM DURATION	Selectable from 10 to 180 seconds
MAXIMUM NUMBER OF ALARMS	MAX 4 alarms per detector during arming period (MAX 10 total alarms)
DELAYS	Programmable Entry and Exit Times
CONTROL PANEL POWER SUPPLY	230 V~ / 50 Hz / MAX: 80 mA in stand-by, 160 mA in alarm
OPERATING TEMPERATURE	-15 °C ÷ +45 °C
BACKUP BATTERY	12 V⎓ MAX 7Ah
GSM DIALLER	• 8 programmable numbers • SMS messages: alarm, panic and telealarm, power supply status, arming status, supervision • Voice calls: alarm, panic, telealarm • Voice Menu
TEMPERATURE SENSOR *(optional)*	Thermostat function sensor for relay AUX output management

* Refere to ***+VS***. If not in used close always on ***+VS***.
** Refere to ***+VS***.

IMPORTANT WARNING – Compatibility

CE 60-3 GSM works correctly only with "100" series peripherals.

OPTIONAL ACCESSORY – Temperature sensor

This control panel can be equipped with a temperature probe that is connected to *CN14* connector. Relay AUX, programmed as "Temperature", will manage the thermoregulation system.

2. INSTALLING THE CONTROL PANEL

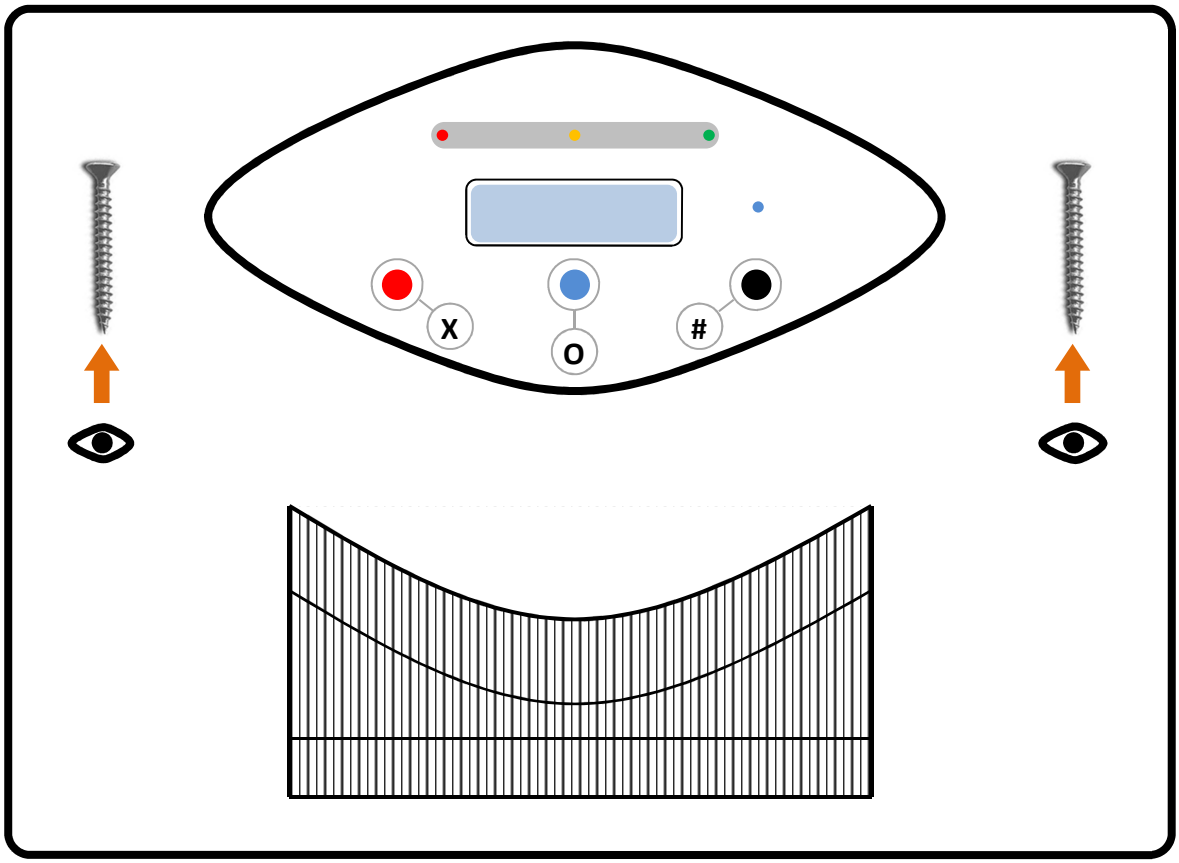
2.1. Choice of the mounting place

For the installation of the control panel it is important to choose with accuracy the right place; this place would be the best compromise in terms of:

- Easy to be accessed by the user (ex. for wall mounting, command managing, display sight, standard maintenance etc.);
- Easiness and availability to access connectors (ex. power line or other wired devices, etc.);
- Protected by tamper attempting (ex. area under control of PIRs);
- Best for wireless range.

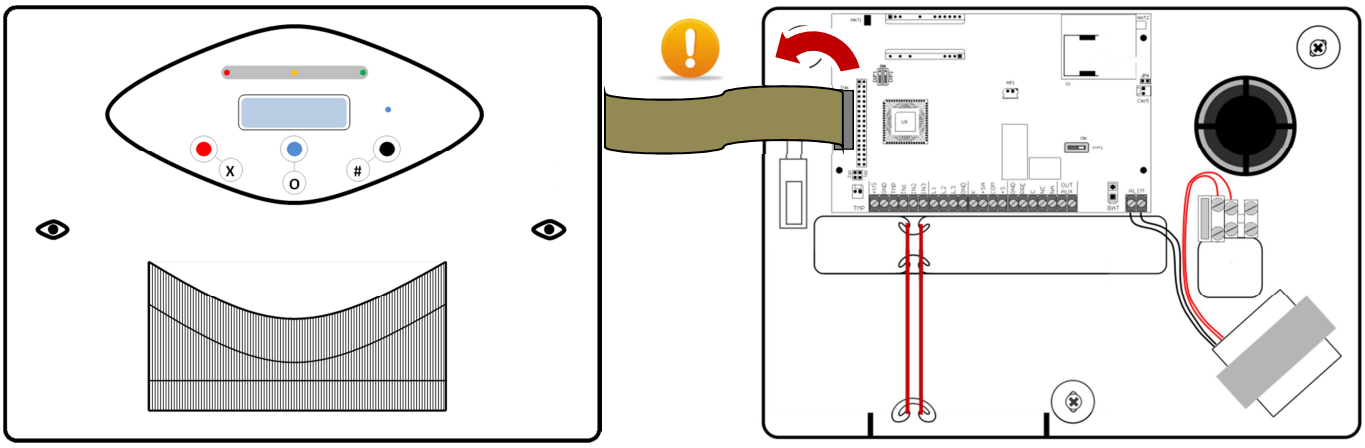
2.2. Wall mounting

Loose the two tightening screws and open the front cover of the control panel:



WARNING

Display and keypad are on the front cover and connected to the electronic board of the control panel by means of a bus communication (16 wires): use the maximum caution to avoid damaging to the system.
Temporarily disconnect the bus communication from the board of the control panel and correct all the operations; then plug the connector back in again.



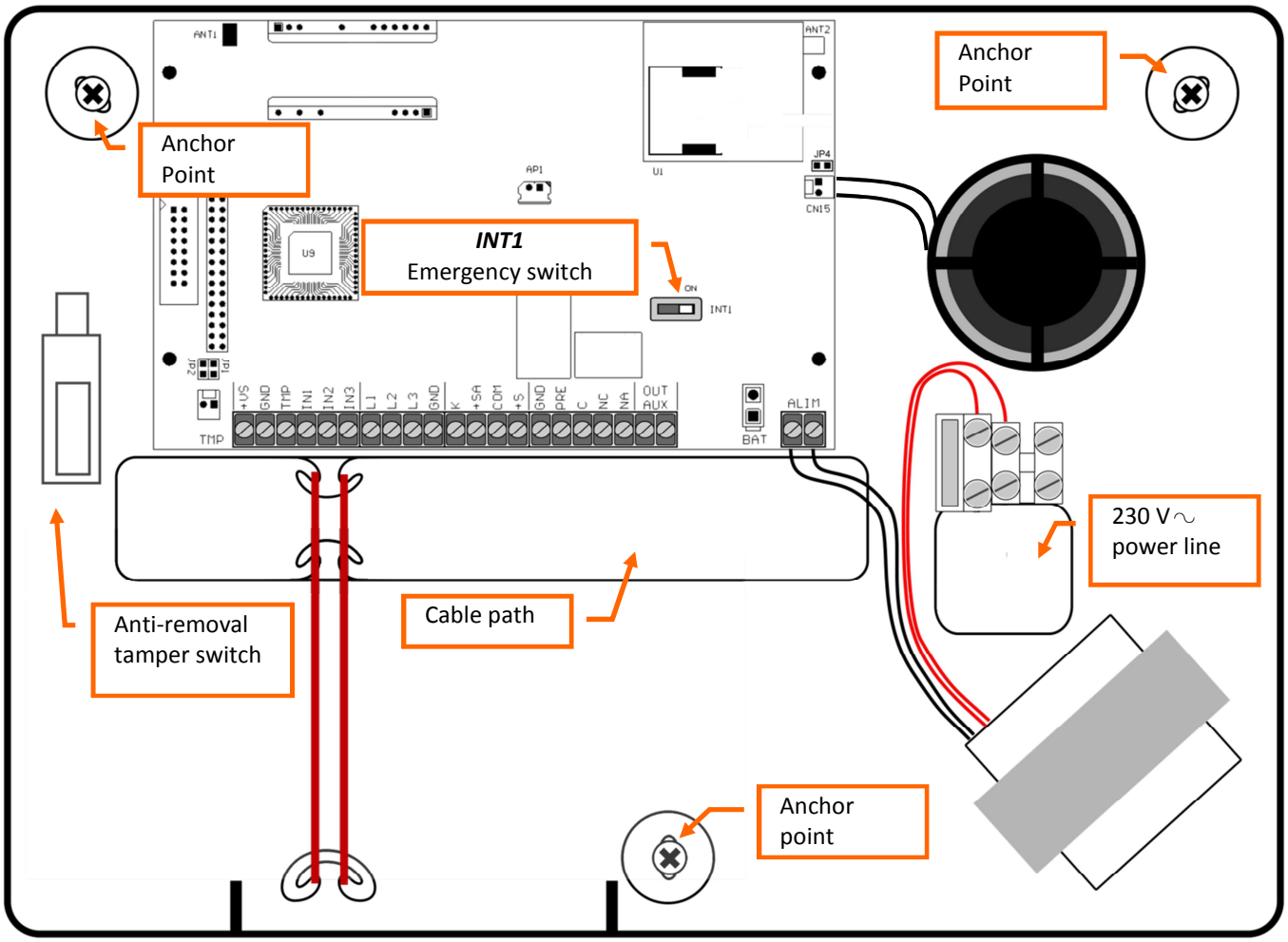
The frame of the housing has three anchor points to the wall: fix the panel to the wall with the three fixed plugs.

NOTICE

The frame is provided with two openings on the back side that are dedicated to:

- **230 V∿ power supply.**
- **Cable path: wired detectors, sirens, keypad connections, etc.**

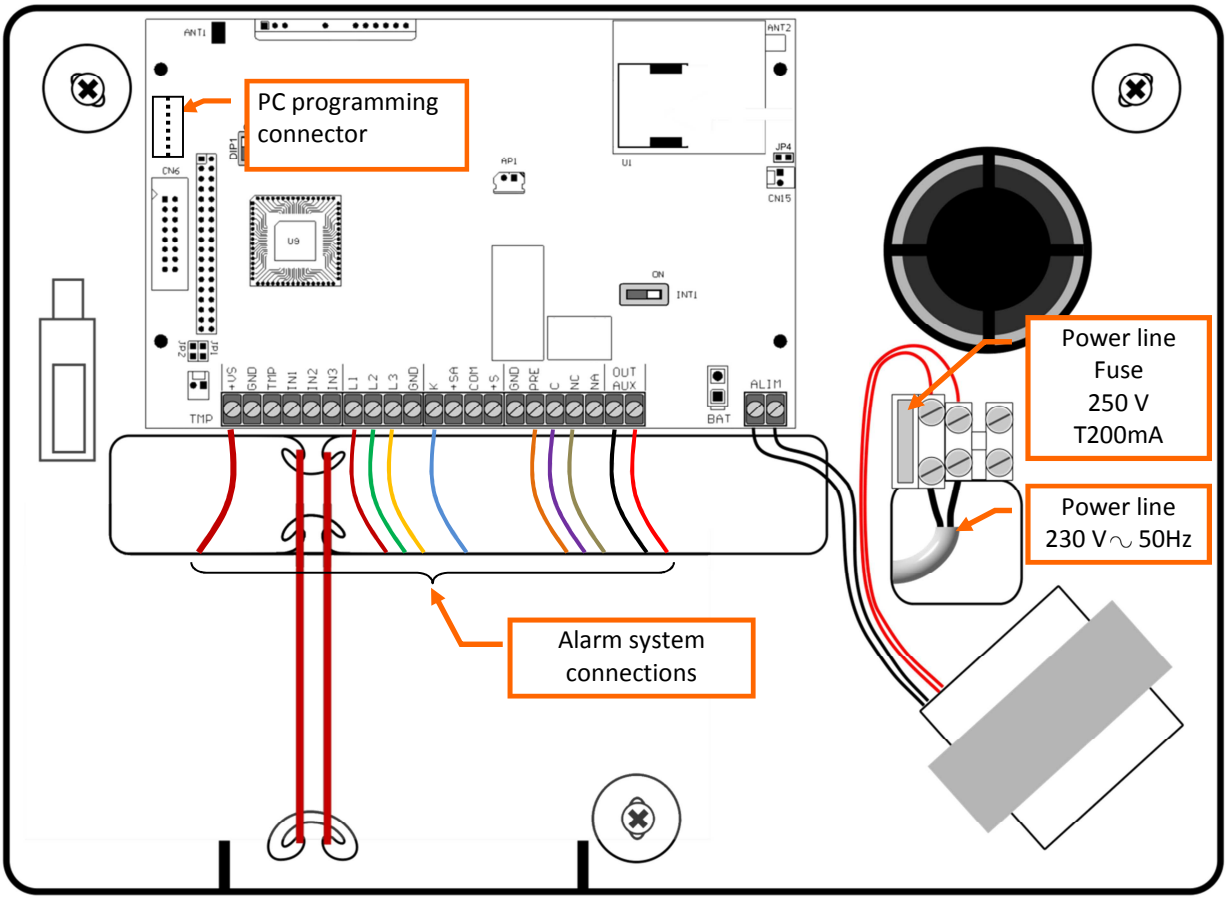
Position the frame so that it overlaps the hole openings to enable wiring into the wall.



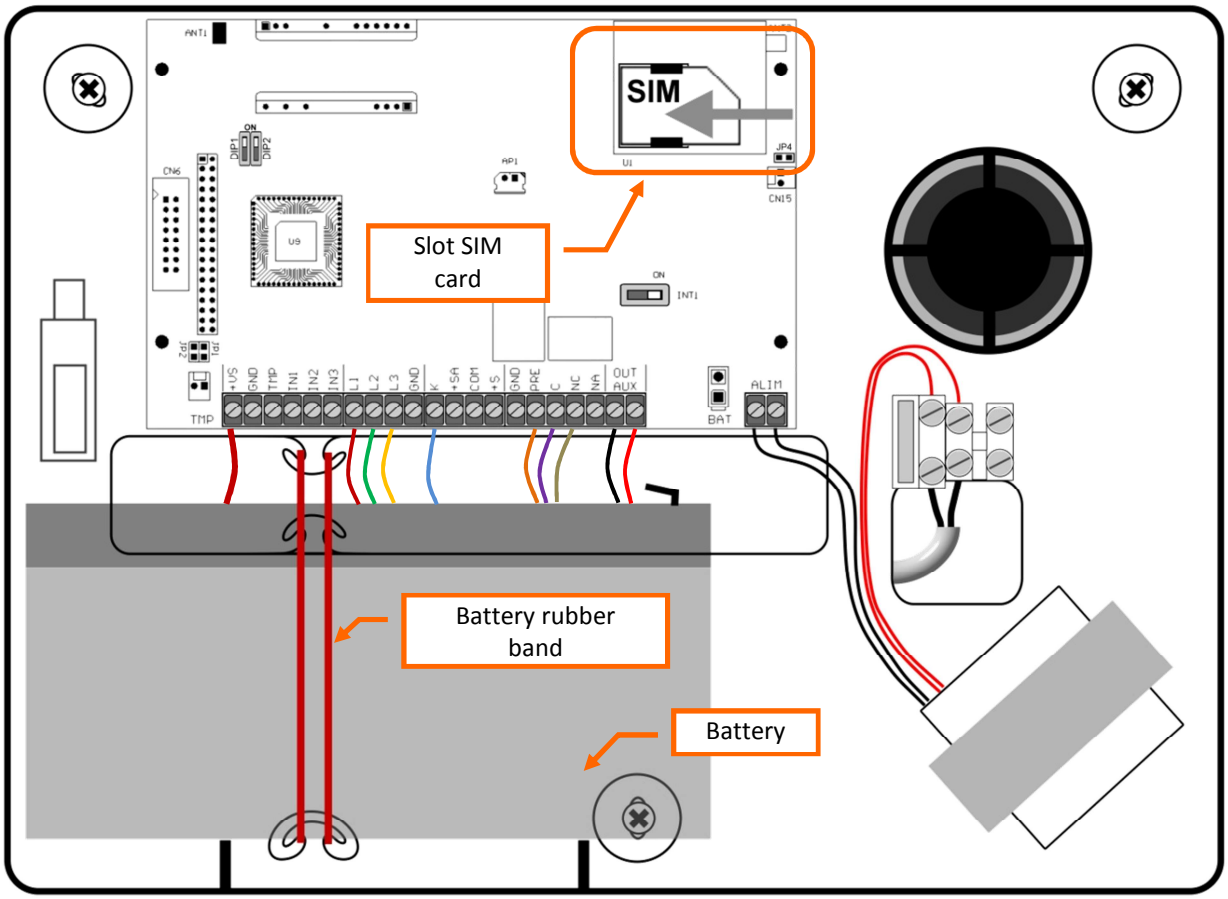
WARNING

Be sure that onboard anti-removal tamper switch touch correctly the wall.

Execute all wired connections: power supply 230 V∿ (**only connection, without power supply on!**) and connection to the alarm system (see section 3, "WIRING DIAGRAM OF THE CONTROL PANEL"):



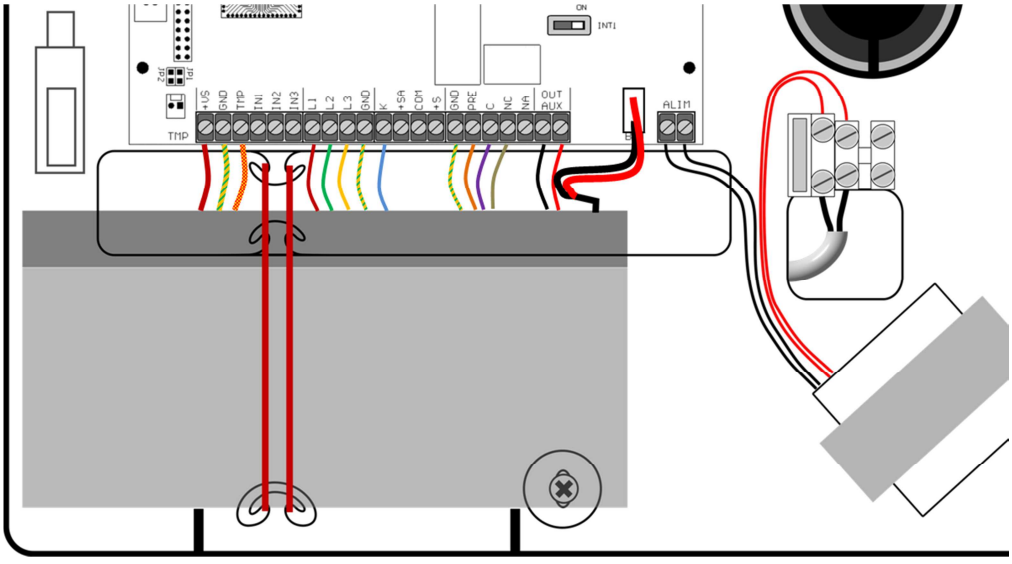
Insert SIM card (***warning: read before the following note***) and introduce the battery (without connecting it; tie up with the rubber band):



WARNING: IMPORTANT INFORMATION REGARDING THE SIM CARD

1. DO NOT INTRODUCE OR REMOVE THE SIM CARD WHEN THE CONTROL PANEL IS ON (either by the power network or the battery).
2. Control panel is able to work with any SIM card, pre-paid or with contract of TIM, VODAFONE and WIND operators.
3. Before using any SIM card, be sure that the PIN code is disabled. To be sure, introduce the SIM card in a mobile phone, verify that there is no PIN code request when turned ON, and if there is, disable the use of the PIN code with the phone configuration.
4. DISABLE any active service of the SIM, like call forwarding, answering machine, etc. To verify the status of these configurations, introduce the SIM card in a mobile phone and call the service number: **##002#**. This string is valid for all operators. This call will be confirmed with a message of "Calls forwarding disabled" (each mobile device has its own viewing modality).
5. Clear all data from the SIM card (ex.: Received messages, contacts,…)

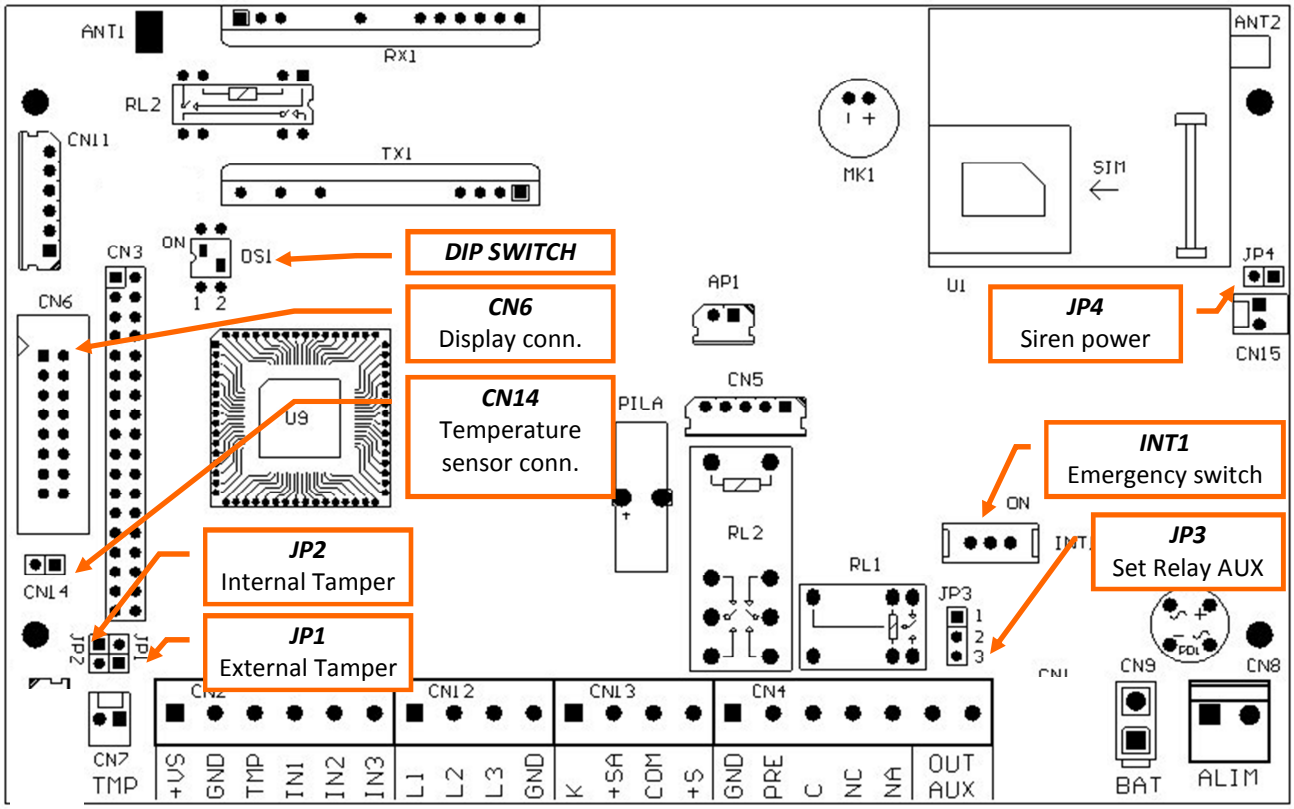
- ***ALWAYS*** execute all wired connections to the control panel with the power supply OFF (no 230 V∿, or battery). After all wiring connections are done, short circuit all not used wired inputs ***IN1***, ***IN2*** and ***IN3*** to connector ***+VS***.
- Exclude internal tamper protection by closing the jumper ***JP2*** (remember to enable again once the settings have been done).
- If external tamper is used, it is mandatory to open jumper ***JP1***.
- Position micro switch ***INT1*** to OFF.
  If control panel is not turned OFF, verify that jumper ***JP1*** is open.
- Switch on power line 230 V∿.
- Connect backup battery to red and black wirings which are on the connector ***BAT***, respecting the color matching (red wire = positive pole "**+**"; black wire = negative pole "**—**"):



Battery must be a lead rechargeable type 12 V⎓.
Battery will allow the system to work even during shortage of main electrical power supply.

At this point the control panel can be put in operation by moving switch ***INT1*** to the ON position.
Start up time **>** Wait for about 5 seconds before the control panel start running.
INT1 could be considered an emergency switch, when it is on the OFF position the control panel is disabled but voltage on the outputs are kept ON for all the peripherals.

3. DIAGRAM FOR CONTROL PANEL WIRING



3.1. Terminal blocks

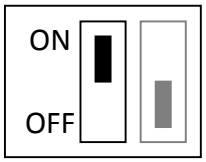
+VS	Positive +12 V⎓ reference: detectors power; ***IN1***, ***IN2***, ***IN3*** and ***TMP*** inputs (200 mA MAX)
GND	Ground connection (negative) for signals and power supply
TMP	Wired tamper input, NC type. *Terminal Closed to* ***+VS*** = stand-by status — *Terminal open* = Wired Tamper alarm ***NOTE: if Tamper is NOT in use, close the jumper JP1***
IN1 ***IN2*** ***IN3***	Normally Closed input types for wired detectors (***NC***). *Terminal Closed to* ***+VS*** = stand-by status — Terminal open = Alarm ***To be connected to +VS even if not in use or disabled***
L1 ***L2*** ***L3***	Signal outputs (*corresponding to LED on the panel*) ***L1*** = Total/Alarm — ***L2*** = Partial/Opened doors — ***L3*** = 230 V~ — ***L1*** + ***L2*** = External
K	Data input for transponder key reader / Input for mechanical key
+SA	Positive +12 V⎓ for external siren power supply or phone dialer (200 mA MAX)
COM	Alarm Command (Positive +12 V⎓ drops down in alarm)
+S	Alarm Command (Positive +12 V⎓ rise up in alarm)
C ***NC*** ***NA***	ALARM RELAY Common (C) — Normally Closed (NC) — Normally Open (NA)
OUT AUX	AUX OUTPUT RELAY– free exchange programmable NC or NA – Programmable from menu
BAT	Connector for backup battery connection (MAX 7 Ah)
ALIM	Terminals for connection of transformer onboard
INT1	Emergency switch ON = functioning OFF = control panel OFF (but power to devices)

3.2. DIP-Switch

Select some of the programming functions of the control panel.
Each dip-switch has two positions (ON and OFF) and is combined to a different function:

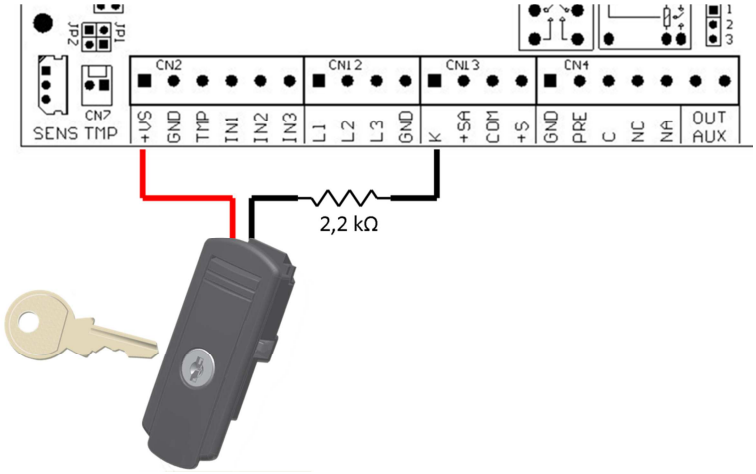
DIP-1

ON



HARDWARE KEY ENABLED

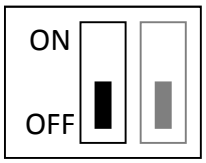
K terminal is used for the connection of an hardware key.
Make a series connection between ***K*** terminal and a 2,2 kΩ resistor and here connect the key to ***+VS***.



NOTICE!
The mechanical key ONLY allows TOTAL ARMING and DISARMING:

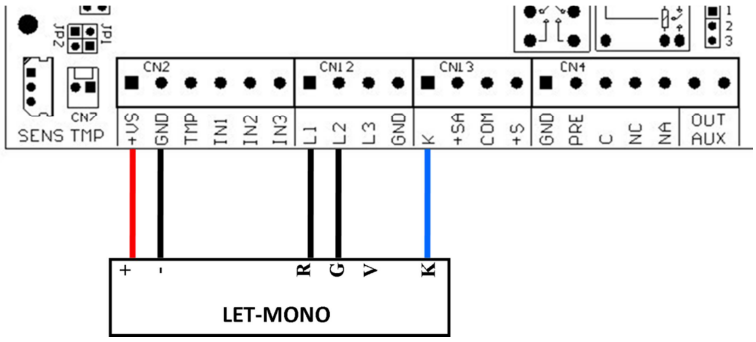
OPEN > TOTAL ARMING **CLOSED > DISARMED**

OFF



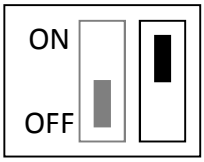
ELECTRONIC KEYS ENABLED

K terminal is used for communication with electronic key readers (ex.: LET-MONO)



DIP-2

ON

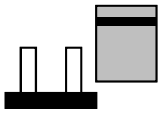
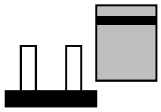


INSTALLER PROGRAMMING
SENDING RADIO CODE “MAINTENANCE”

OFF

NORMAL OPERATION
SENDING RADIO CODE “MAINTENANCE ENDED”

3.3. JP1 and JP2 – EXTERNAL and INTERNAL TAMPER

JP1 *(disable external tamper)* ***Warning**: in case external tamper is going to be used, it is **MANDATORY** to open this jumper*		***CLOSED***	TAMPER DISABLED
	***WARNING!** In this case, to avoid working anomalies of the control panel it is MANDATORY to not connection anything to the **TMP** terminal*		
		***OPEN***	TAMPER ENABLED
JP2 *(disabling internal panel tamper)*		***CLOSED***	TAMPER DISABLED
		***OPEN***	TAMPER ENABLED

3.4. HOW TO OPEN THE COVER FOR MAINTENANCE

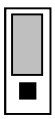
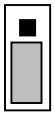
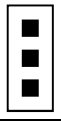
Tamper is active 24h/24 (at system armed or disarmed).

To allow maintenance, the control panel disable the tamper alarm for 2 minutes from last disarming command.

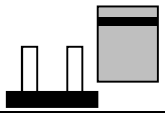
To open the cover: send a disarm command and – within 2 minutes – open the cover and exclude the tamper by closing ***JP2*** or switch off the control panel with ***INT1*** = OFF.

After the maintenance, close the cover within 2 minutes from the opening of ***JP2*** or from ***INT1*** = ON.

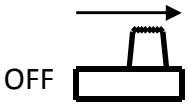
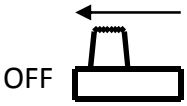
3.5. JP3 - RELAY AUX

JP3 *(setting Relay AUX)*	***CLOSED*** between 1 and 2	1 2 3 	N.C.
	CLOSED between 2 and 3	1 2 3 	N.A.
	OPEN	1 2 3 	n.d.

3.6. JP4 – INTERNAL SIREN POWER

JP4 *(internal siren power)*	***CLOSED***		HIGH POWER
	OPEN		LOW POWER

3.7. INT1 – EMERGENCY SWITCH

INT1 *(emergency switch)*	***ON***		PANEL ON
	OFF		PANEL OFF

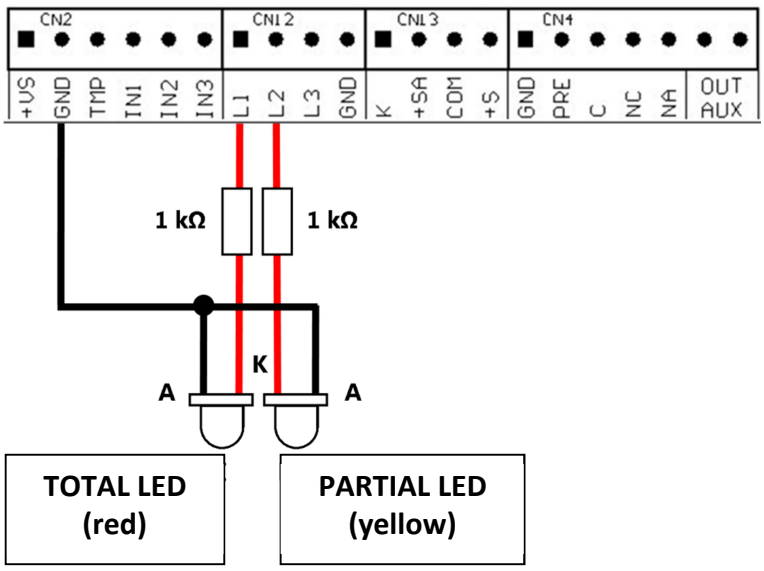
> ***Start up time of the control panel***
> *Since INT1 = ON, about 5 seconds are necessary for starting up the system.*
> *During this period of time, display will be off.*

3.8. CN14 – TEMPERATURE SENSOR

CN14 *(temperature sensor terminal)*	TERMINAL FOR TEMPERATURE SENSOR CONNECTION *(optional)*

3.9. LED connection for system status

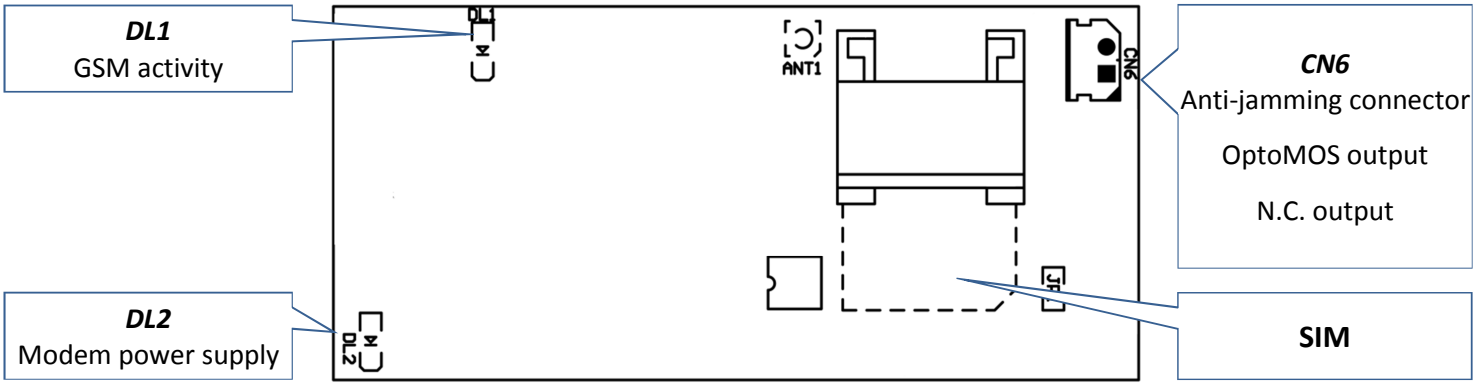
You can see system status with LED on board and also if you connect LED externally.



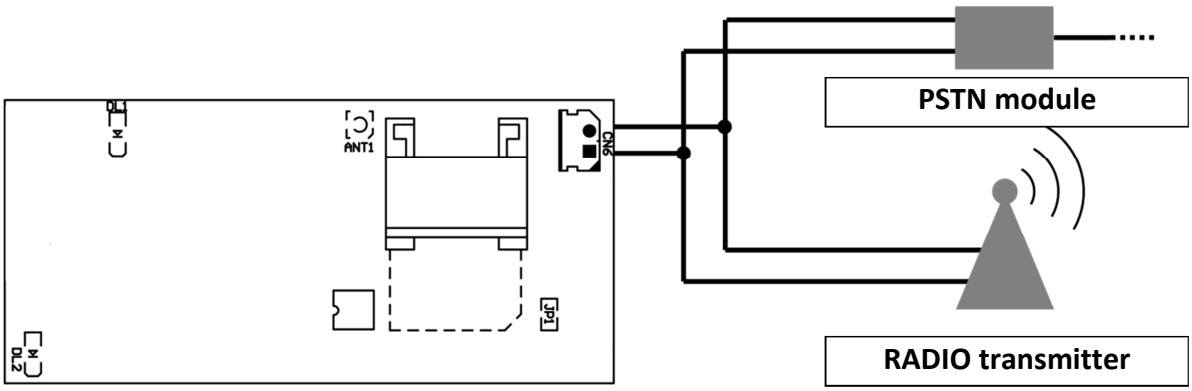
3.10. CN6 (GSM Module) – ANTI-JAMMING (GSM anti-blinding protection)

The panel can recognize if the GSM module can not connect correctly to the GSM network **due to a GSM blinding attempt**.

There is a dedicated output ***CN6*** - activated when blinding is present – through which is possible to activate an additional alarm communication system (example: external PSTN module, radio transmitter…) and receive an advice.



Connection example:



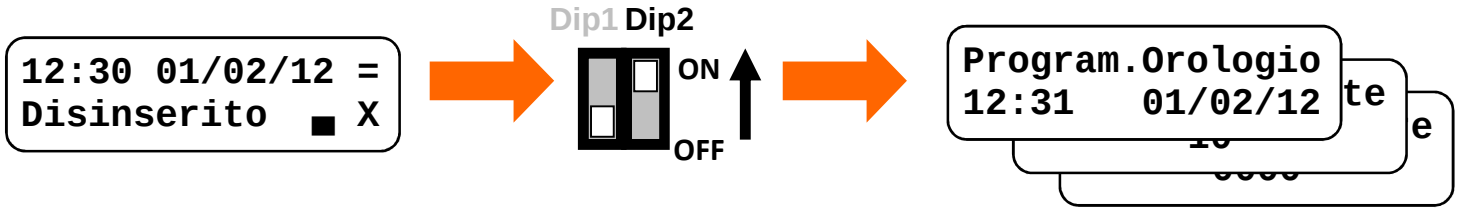
If the GSM module detects jamming on the GSM signal, it switches the output ***CN6*** (OptoMOS, N.C. type):

- the alert starts after about **20 seconds from jamming**: ***CN6*** will **open**.
- the output return to rest after about **30 seconds from the ending of the jamming**: ***CN6*** will **close**.

> *When there is no GSM network service (example: the network is temporarily unreachable, the control panel is installed in a place where there is a low level GSM signal …) the anti-jamming DOES NOT consider blinding, the dedicated output stay at rest (CN6 stay closed).*

4. ACTIVATE INSTALLER MENU

To enter the "Installer menu", disarm the control panel then move ***DIP-2*** to ON: the control panel will go directly to installer menu.

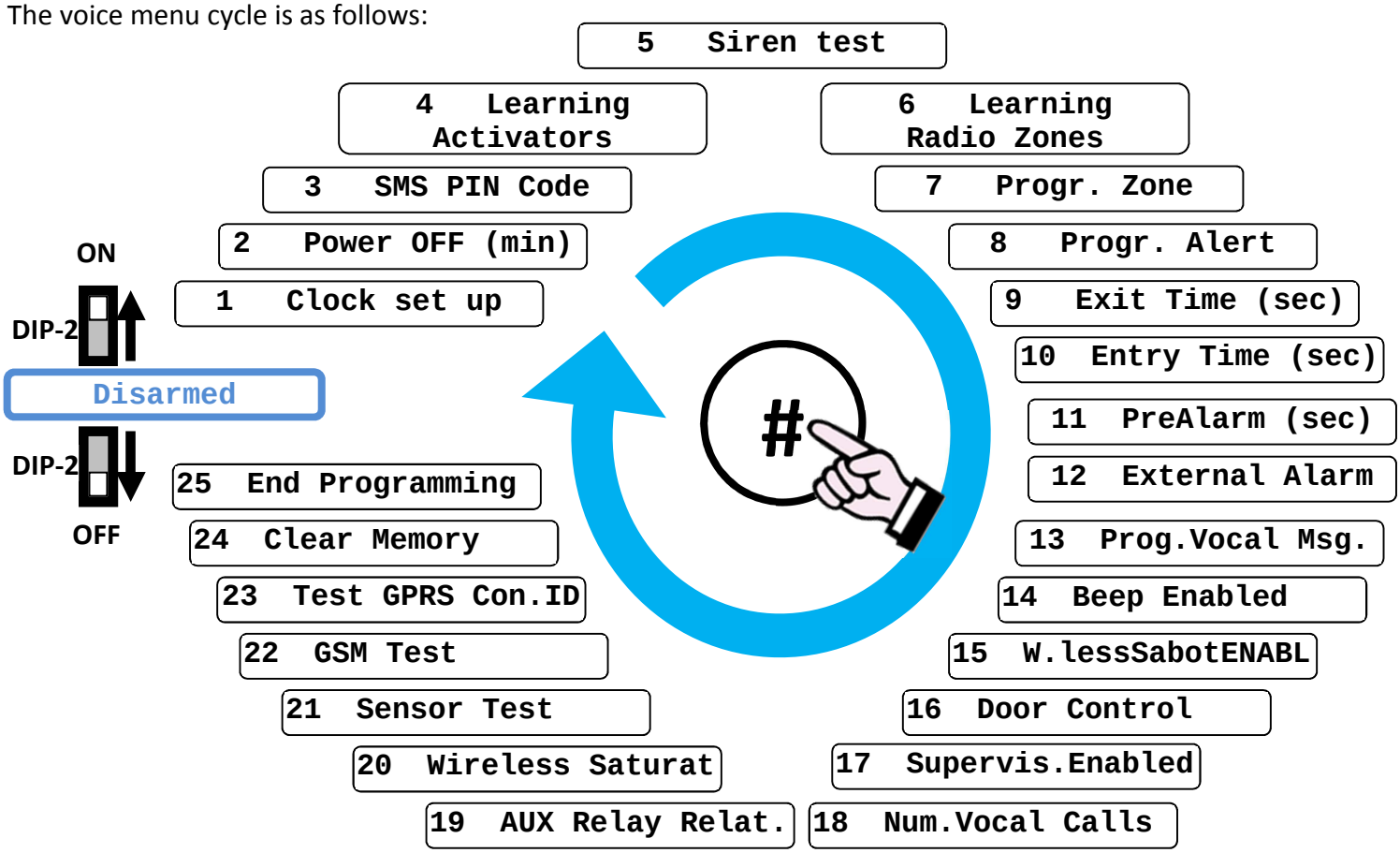


With this menu you can change control panel settings by using the "**X**", "**O**" e "**#**" keys on the panel.

> ***MAINTENANCE Code for SIRR-A/B v2***
> *When **DIP-2** is set to **ON**, the control panel sends a "**maintenance**" radio code. If the control panel is set to a predisposed siren, it will emits a "beep" and will flash indicating that it is now possible to open the cover without setting off the tamper alarm.*
> *When **DIP-2** is set to **OFF**, the control panel sends a "**maintenance finished**" radio code. The siren will re-enable the tamper alarm (it emits a "beep" and flash).*
> *This code will have no effect on the DVTR-RT v2 radio keyboards.*
>
> ***Note**: enable the control panel to transmit its radio codes by learning an **activator in position n. 1**.*

4.1. Installer menu

The voice menu cycle is as follows:



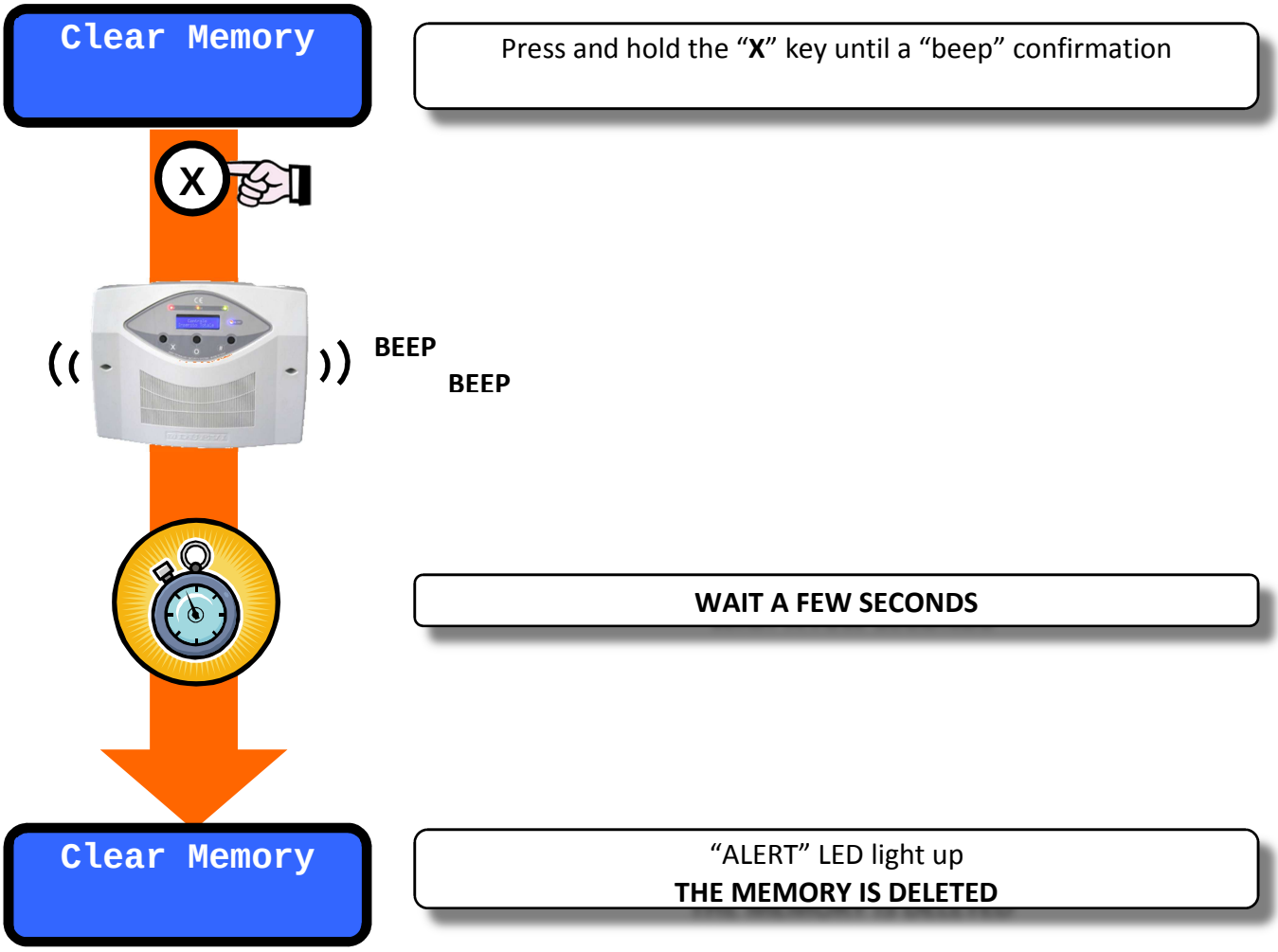
To go form one voice menu to the next press the "#" key.

5. DELETE MEMORY

As in the first operation, it is highly recommended that you completely delete all the memory to reactivate default parameters and avoid maintaining any of the test settings.

> *WARNING*
>
> *THIS FUNCTION DELETES THE MEMORY IN THE CONTROL PANEL, EXCEPT THE REGISTERD ALARM VOICE MESSAGGES.*
>
> *AFTER THIS OPERATION THE CONTROL PANEL WILL BE COMPLETELY "EMPTY" MEANING ALL THE SENSORS, REMOTE CONTROLS, KEYS AND PHONE NUMBERS WILL HAVE TO BE PROGRAMMED.*

To perform total deletion you need to go to the "INSTALLER MENU" (see paragraph 4), select the voice menu "Clear Memory" and proceed as follows:

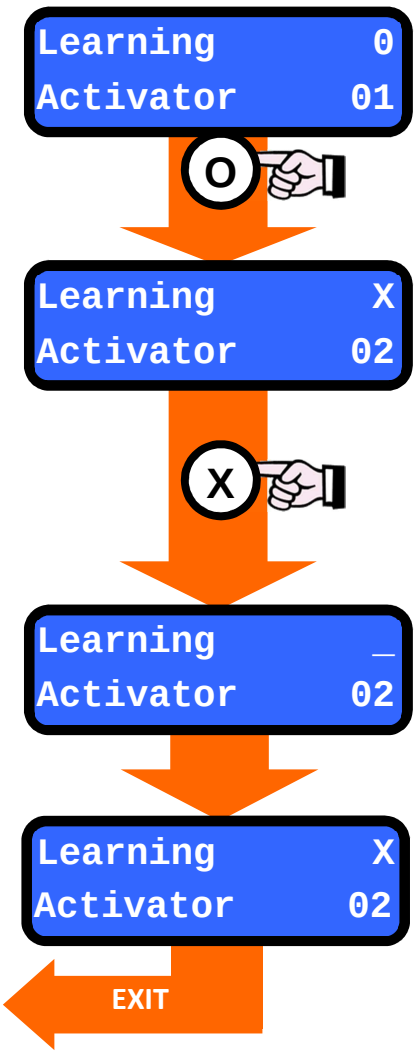


6. LEARNING ACTIVATORS

This function is used to add new activators (remote and transponder keys) to the system. The control panel has a maximum memory of up to 16 activators.
To add one or more activators you must enter the "Installer menu" (see section 4) and proceed as follows (***doing the same for each activator to be learned***):

WARNING – Activator n. 1

If an activator is successfully learned in position 1 the control panel is enabled for radio codes generation: *Arm, Disarm, alarm start* and *alarm end* (see section 6.1 "Sirens and voice synthesizers).
Leave this memory location FREE in the case you do NOT use this function.



Quick pressing on the "**O**" key will bring you to the next memory location (from "**Activator 01**" to "**Activator 16**")

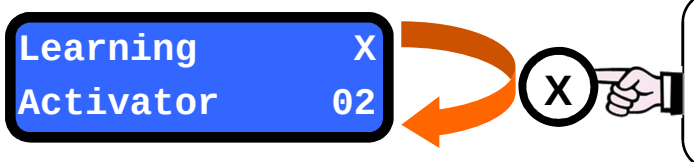
The "**X**" indicates that the selected location has already stored an activator.
The "0" instead indicates a vacant location.

After selecting the desired location, press the "X " key.
You will see the character "_ ".
The control panel is now ready to add the code of the new activator.

Transmit <u>ONLY</u> with
the activator you wish to store.
It can be a radio controlled operation,
a CHT/CHS key or keyboard.

If the control panel receives the correct signal from the activator, it will confirm the memorization with an "X" instead of "_ ".
If memorization is not possible, the control panel will emits three "beeps".

Deletion of an activator



Position it to the activator that you want to delete then press and hold (at least 3 seconds) the "X" key. When the "0" symbol appears the activator has been deleted.

<u>IMPORTANT NOTES</u>

1) You CAN NOT ADD THE SAME INSERTER IN TWO different memory locations.
2) It is possible to overwrite memory cells that are already occupied (eliminating the existing activator) by simply transmitting the new activator code in the already occupied cell.

6.1. Sirens and radio voice synthesis

For sirens and/or radio voice synthesis, you must enable the control panel to transmit the radio codes **>** ***to do this an activator MUST be learned in activators memory location n. 1***.

These codes will be transmitted for the following events:

- Arming
- Disarming
- Start alarm
- Stop alarm
- Start maintenance
- Stop maintenance

WARNING – Absence of radio codes

If NO activator is learned in position n. 1, the control panel will NOT enabled the generation of radio codes.

7. Learning wireless zones

There are two types of learning:

- only by tamper code transmission
- by any radio code transmission

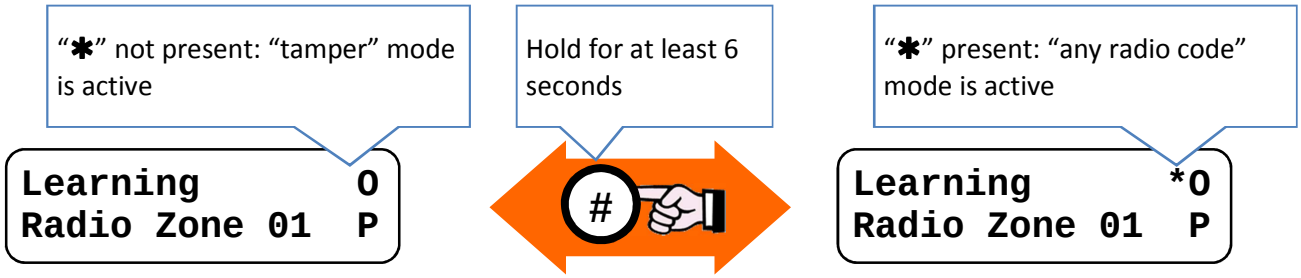
The choice of the mode depends from the radio device to be learned: check which is the mode used by the device.

To add or modify radio device, enter in INSTALLER MENU and select “Radio Zone Learning”:

```
Learning          O
Radio Zone 01     P
```

Select the learning mode: hold down the “#” button for at least 6 seconds until – after “Learning” – the “✱” symbol appears (for “any radio code”) or disappear (for “tamper code”):

- “tamper” mode: it’s the default used mode, “✱” symbol NOT present
- “any radio code” mode: “✱” symbol present


“✱” not present: “tamper” mode is active
Hold for at least 6 seconds
“✱” present: “any radio code” mode is active
Learning O
Radio Zone 01 P
#
Learning *O
Radio Zone 01 P

Automatic zone allocation

The control panel recognizes the type of sensor learned and automatically allocates it to the corresponding zone (ex.: CTSR and DIRRVE to PARTIAL; DIRRV to TOTAL). It is possible to modify this assigment.

IMPORTANT NOTES

IT IS NOT POSSIBLE TO ADD THE SAME SENSOR IN TWO DIFFERENT MEMORY LOCATIONS.

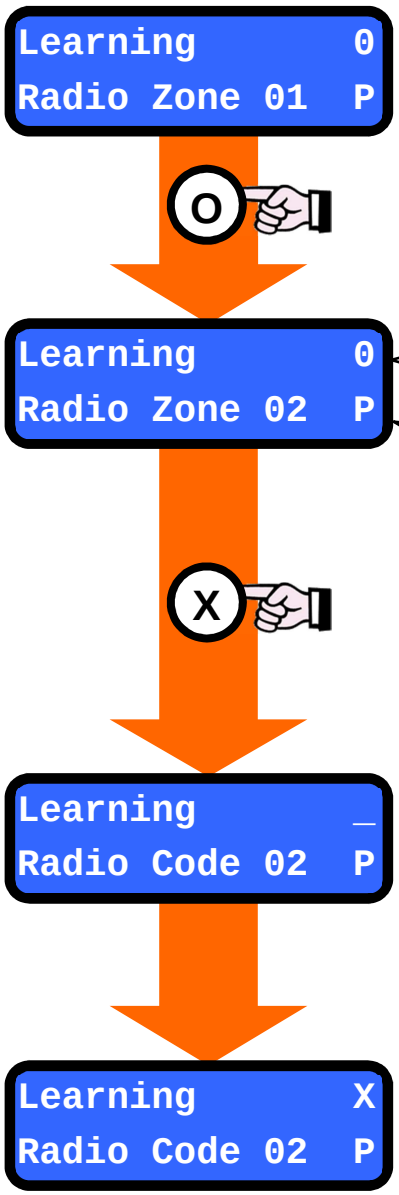
It is possible to overwrite a memory location that has already been used (deleting the sensor that was already allocated), by simply learn the new sensor over the already used location.

We advise to carry out all the learnings at bench, before installation.

When learning a radio device, power off or prevent detections by other radio devices: the contemporary transmission of more than one radio code does not allow correct learing.

7.1. Learning by “tamper”

This mode allow to learn the radio devices just operating the tamper switch onboard (so not any radio code of the device).
The control panel uses this mode by default when entering in “Radio Zone Learning”.



60 is the maximum number of wireless sensors that can be memorized.

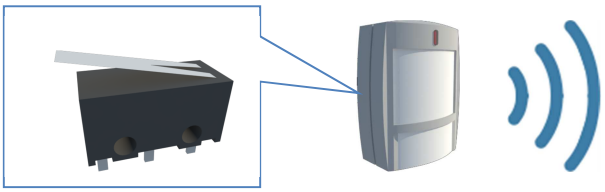
At each quick press of the “**O**” key you go to the next memory location (from “Radio Zone 01” to “Radio Zone 60”)

“**X**” = memory position already occupied by other device
“**0**” = memory position free

“**P**” = the device is perimeter type
“**T**” = the device is volumetric type (PIR)

Once positioned in the desired zone:
Press “X” key quickly **>** You will see “_”: the control panel is now ready for another sensor code to be programmed.
Hold down “X” key **>** Delete the current sensor.

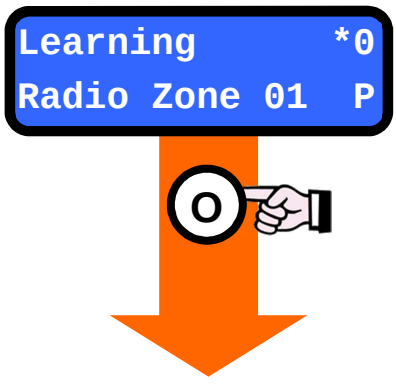
Act on tamper switch of the device:



If the control panel receives a signal from the sensor correctly, it will confirm its memorization with an “**X**” in the place of “_”.
If the memory is not possible the control panel will emit three “beeps”.

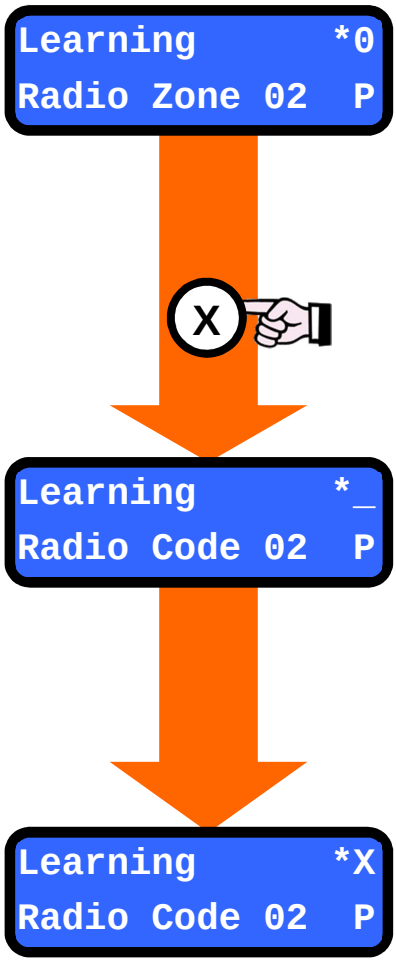
7.2. Learning by “any radio code”

This mode allow to learn the radio devices by any radio code they transmit.
It is possible learn the sensors just make a detection:



60 is the maximum number of wireless sensors that can be memorized.

At each quick press of the “**O**” key you go to the next memory location (from “Radio Zone 01” to “Radio Zone 60”)



In the selected memory location you could find the following symbols:

after "**Learning**":

"**X**" = already a memorized sensor in this location.

"**0**" = free memory location.

after "**Radio Zone…**"

"**P**" = perimeter type sensor.

"**T**" = volumetric type sensor (PIR).

Once positioned in the desired zone:

Press "X" key quickly **>** You will see "_": the control panel is now ready for another sensor code to be programmed.

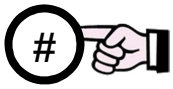
Hold down "X" key **>** Delete the current sensor.

Provoke an alarm signal <u>ONLY</u> from the sensor to be memorized, so that it transmits its code to the control panel.

If the control panel receives a signal from the sensor correctly, it will confirm its memorization with an "**X**" in the place of "_".

If the memory is not possible the control panel will emit three "beeps".

7.3. Learning siren tamper (only for SIRR-A/B v2)



Chose an empty sensor memory location.
Push the "#" key for at least 3 seconds and no more than 6 seconds: the control panel will send to siren a request to transmit its own tamper code; the siren will send its code that will then be learned.

8. RELAY AUX PROGRAMMING

It is possible to associate the output of the independent relay (AUX) to the various events that may occurs in the control panel.

The events that can be used are the following:

- ***ON/OFF*** **>** AUX output is activated/deactivated by SMS command.
  The SMS commands are (*): **xxxx#out onttt**, **xxxx#out on**, **xxxx#out off**.

- ***TEMPERATURE*** **>** This feature can be activated only with the probe (*optional*): the control panel uses the AUX output as the command for thermoregulation system, based on the temperature detected and desired.
  The SMS commands are (*): **xxxx#temp onTT**, **xxxx#temp off**.
  (*) for details on these SMS commands see USER'S GUIDE

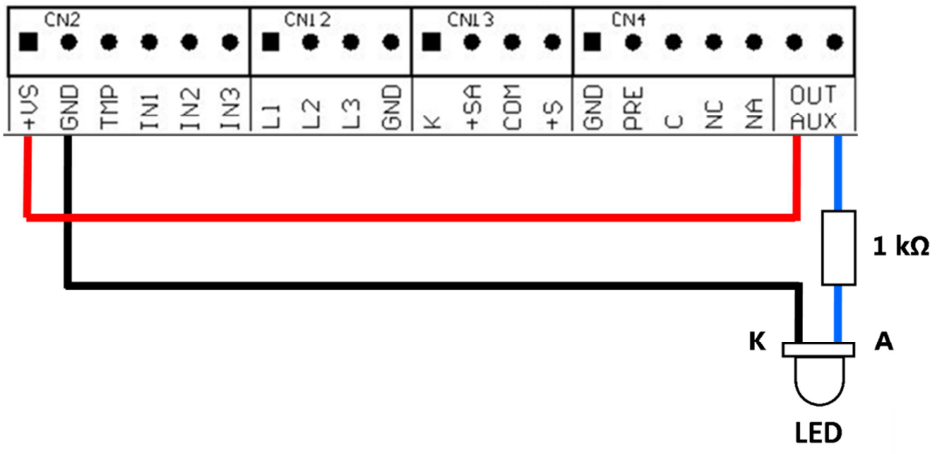
- ***RING*** **>** AUX output is activated for 2 seconds when the control panel receives a telephone call from a number it has in its memory.

WARNING – VOCAL MENU and relay programmed like RING

The AUX relay MUST NOT be programmed as RING, otherwise the call to the control panel will be used as a relay action and the vocal menu will be deactivated!

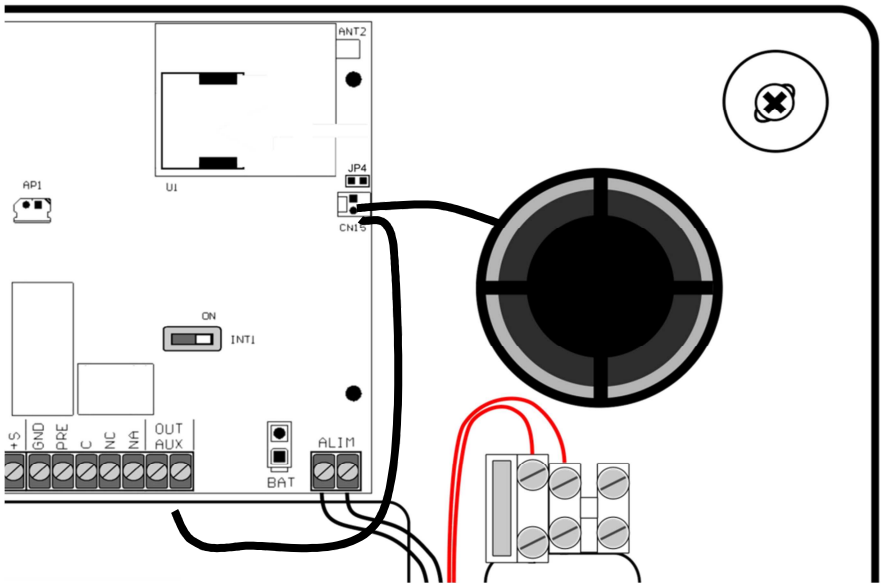
- ***TELEALARM*** **>** The AUX output is activated in correspondence with a tele-alarm event.

- ***OUT TC*** **>** The AUX output is activated when the control panel is armed (*totally or partially*), it goes back to rest when the panel is disarmed (*switching is immediate ignoring the Exit Time*).

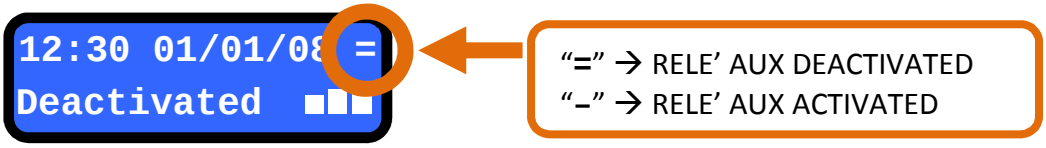


Example of OUT-TC signal connection with LED

- ***INHIBITION SIREN when in PARTIAL ARMING*** **>** If the control panel is armed in partial mode, the AUX output switches when an alarm is detected. Allowing thus the possibility of excluding the internal siren if you connect the AUX in series between the AP and the siren (*as in figure below*):

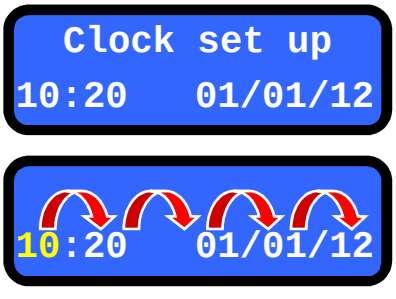


Relay status (open / closed) is displayed in real time on display:



9. FUNCTIONS

9.1. Clock Set up



O — Each pressure will increase the value of one unit.

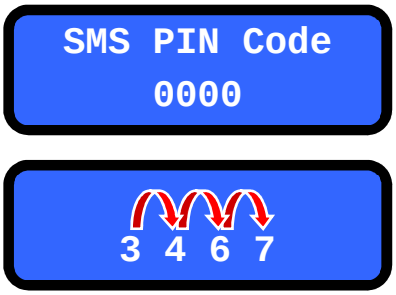
X — Each pressure select: HOURS, MINUTES, DAY, MONTH, YEAR

9.2. Power line failure minutes

The time in minutes of absence of power line (black out), before the control panel signals “Power Line OFF”.

X — **Minutes with no network**
Press **1 time** to start the count from 0.
Press again to stop the count at the value you want.

9.3. Dialler Security Code



O — Each pressure increase the value of one units

X — Each pressure select the next digit.

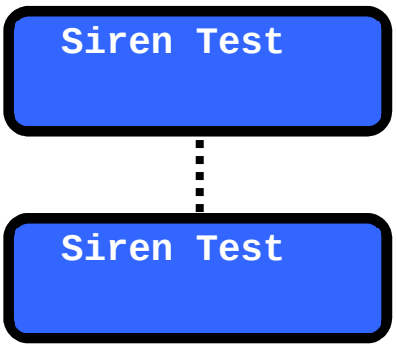
This is the 4-digit security code for the dialler, to be included in the SMS for programming and management. The factory default value is "**0000**" (four zeros).

9.4. Learning Activators

Learning Activators
See “LEARNING ACTIVATORS” section

9.5. Siren test

To check the quality of radio communication between the control panel and siren.



X — An alarm is stimulated: the alarm radio code is sent to the siren and then after 3 seconds the disarm radio code. If the communication is correct the siren will sound for 3 seconds.

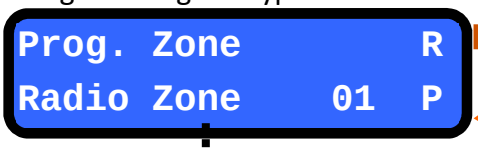
O — The siren is require to send its tamper code. The siren responds with a blinking light and sends the code requested.
If the code has already been learned the control panel emits a few “beeps” (confirmation of learning).
If the code was not saved it will not “beep”.

9.6. Learning Radio Zones

Learning Sensors
See “LEARNING WIRELESS ZONES” section

9.7. Programming Zone

Programming the type of insertion and activation of each zone:



At each press, it will move to the next zone (Wired Zones and Radio Zones)

Short press changes the status:
- **R** = sensor with Entry Time
- **I** = Instantaneous alarm sensor
- **D** = sensor Disabled

Long press changes insertion:
- **T** = Total
- **P** = Partial
- **E** = External

9.8. Programming ALERT

Programming ALERT warning sound
(See USERS MANUAL)

9.9. Exit Time (seconds)

Time for exit in seconds
Press 1 time to start count from zero.
Press again to stop the count at the desired value.

9.10. Entry Time (seconds)

Time for entry in seconds
Press 1 time to start count from zero.
Press again to stop the count at the desired value.

9.11. Pre-alarm time in Seconds

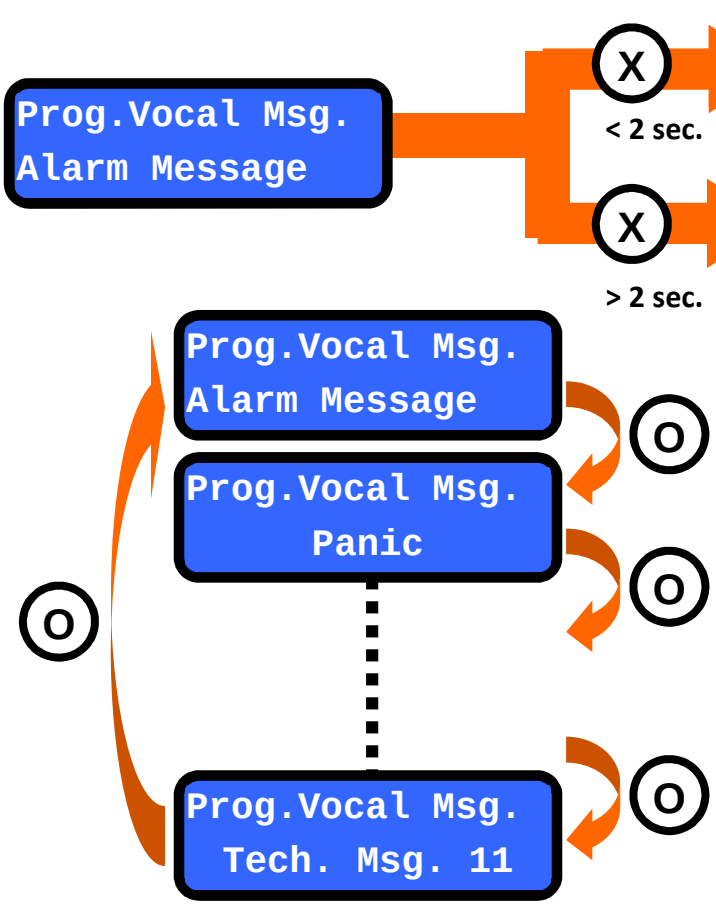
Time of PreAlarm in seconds
Press 1 time to start count from zero.
Press again to stop the count at the desired value.

9.12. Outdoor Ringtone

Outdoor Alarm (Yes/No)
Press "**X**" to activate or deactivate this function (see USERS MANUAL)

9.13. Programming Vocal Messages

Allows the recording and listening of vocal messages used by the GSM dialler in the case of: alarm, panic, silent alarm (*see USER MANUAL for details*).



Listen the message.

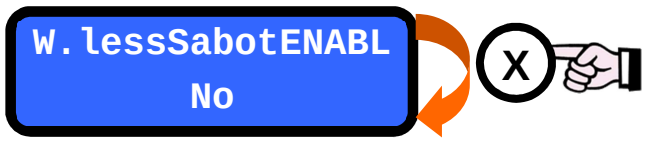
Record the message.

Programming Vocal Messages
Select the "**O**" button for the vocal message you want (alarm, panic or Silent).
Briefly press the "**X**" to listen actual recorded.
Press and hold the "**X**" button to record your message (max 12 seconds), you can stop recording by briefly pressing the "**#**".

9.14. Beeps at Arming

"Beep" for arming/disarming
Press the "**X**" to activate (ON) o deactivate (OFF) the acoustic signal at the arming or disarming.

9.15. Radio Sabotage



Radio Sabotage (Yes/No)
The control panel, when armed, signals an alarm for "Radio Blinding" if it detects anomalies and/or failures on radio frequencies. The signals activate about 50 seconds after the detection of blinding on the carrier or the modulated signal.

9.16. Door Control

Door Control (Yes/No)
The control panel runs a check on all the zones to verify if there are any “opened doors” at the moment it is armed and signals an abnormal situation.
The signal lasts about 10 seconds.

9.17. Sensors Supervision

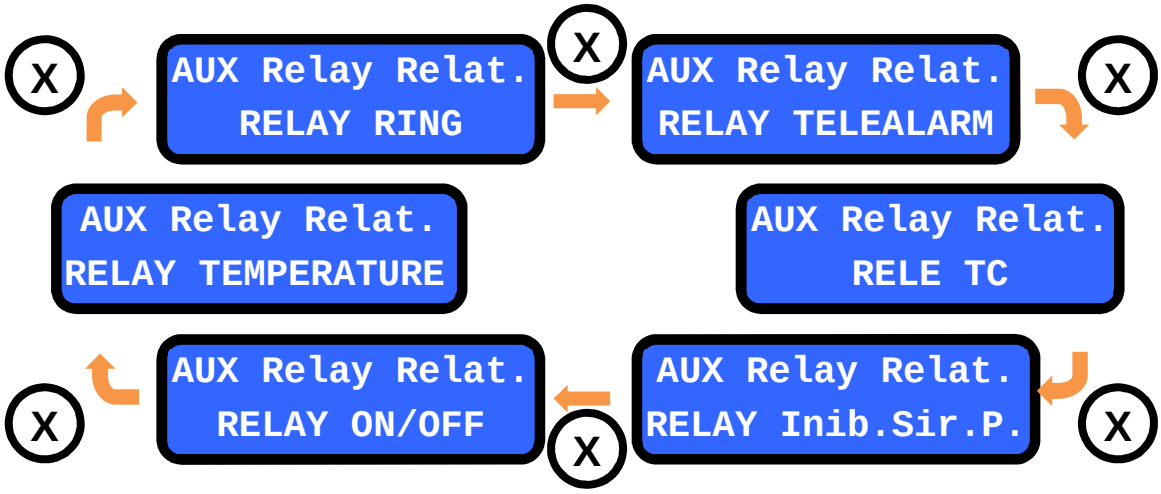
Sensors Supervision (Si/No)
The control panel checks all the memorized sensors every hour to make sure they are still operating. If a sensor does not respond for three consecutive times within 12h, the panel indicates "Supervision Failed”.

9.18. Number of Vocal Calls

Number of Vocal Calls (1 ÷ 9)
Set the number of calls that the control panel will make to each phone number stored, in the case of alarm.
Each time you press "X" you increase the value.

The dialler calls – for the number of times set – each number enabled: starting from the first, as many times as requested, then moves to the next and so on.
After finishing, the call cycle will start sending SMS.

9.19. AUX Relay Association



Rele AUX Assoc.
(see par. 8)

9.20. Radio Saturation

Radio Saturation Test
Press the "**X**" key to activate/deactivate the Radio Saturation Test (see paragraph 13)

9.21. Sensors Test

Sensors Test
Briefly press the "**X**" will activate the test mode of the wireless sensors learned.
It will show you the number of sensors currently memorized and their names.
As each sensor is activated the control panel will beep, display the name of the active sensor and subtracting the number of remaining sensors left to be tested.
The test is successful when the display will indicate "Number of sensors 00 ".

9.22. GSM Test

Before activate the GSM test it is required to program **the first telephone number on control panel** (by software ComCE603 v4.0 or SMS, see Software and User manuals). If not, the GSM test fails. The telephone number must be a mobile type (to perform correct calls and SMS sending tests).

Quickly press the "**X**" button to activate the test mode.
Press the "**#**" button to go on the test:

- Modem working test (Modem OK / NOT OK)
- Network Operator (operatore name)
- Modem signal (graphic bar for GSM field)
- Ask for residual credit (change YES/NO with "**O**" button)
  - YES: credit request, visualized on display
  - NO: next step
- GSM test (change YES/NO with "**X**" button):
  - YES: GSM network communication test (SMS then VOCAL CALL to the first memory number) Stop the test with the "**X**" button
  - NO: end GSM test

9.23. Test GPRS Contact ID

Before activate the GPRS Contact ID test it is required to program the **Contact ID parameters** (only by software ComCE603 v4.0, see Software manual). If not, the GPRS test fails: press "**X**" button to stop and exit the test.

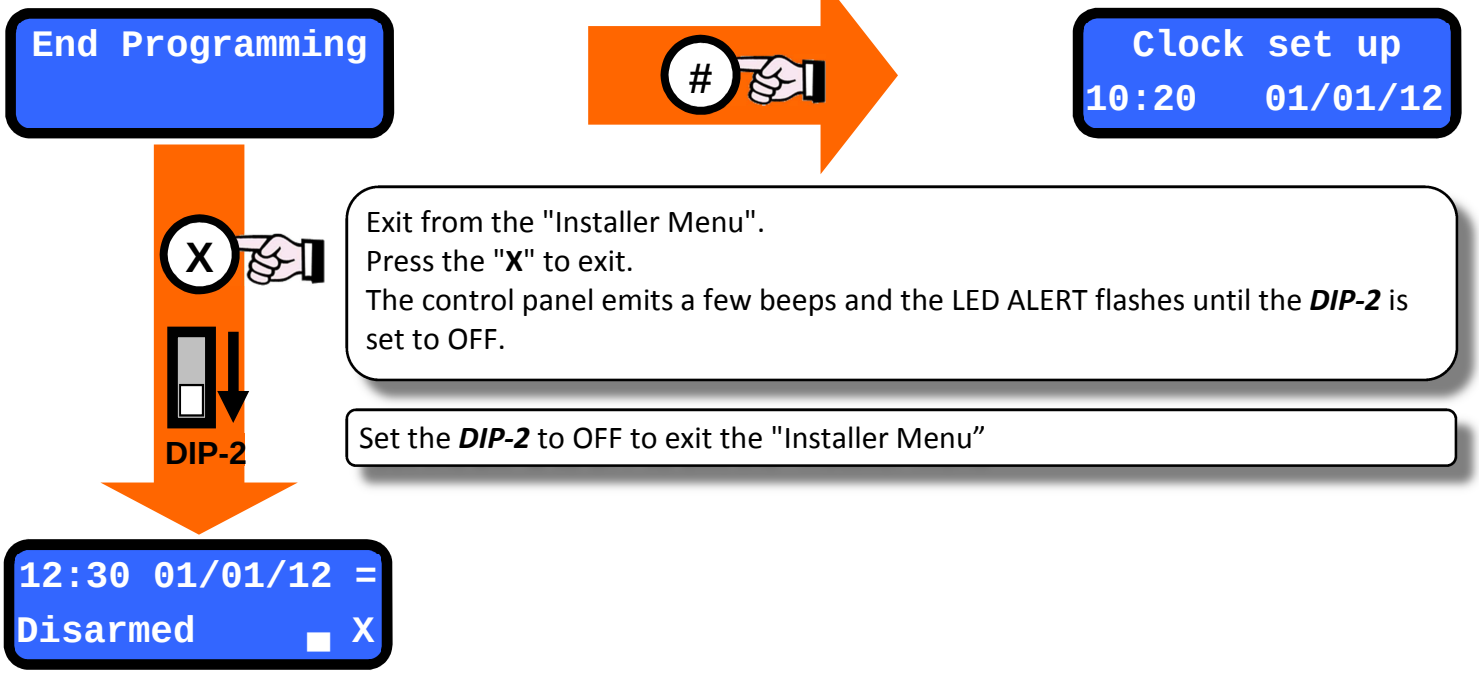
Quickly press the "**X**" button to activate the test mode.
Press the "**#**" button to go on the test:

- Modem working test (Modem OK / NOT OK)
- Network Operator (operatore name)
- Modem signal (graphic bar for GSM field)
- GPRS test (change YES/NO with "**X**" button)
  - YES: GPRS communication test
  - NO: stop GPRS test

9.24. Clear Memory

Clear Memory
See paragraph 5, “DELETE MEMORY”

9.25. End Programming



Exit from the "Installer Menu".
Press the "**X**" to exit.
The control panel emits a few beeps and the LED ALERT flashes until the ***DIP-2*** is set to OFF.

Set the ***DIP-2*** to OFF to exit the "Installer Menu”

10. PROGRAMMING GSM DIALLER

10.1. Programming telephone numbers

- The control panel has the ability to store up to 8 phone numbers to send messages by calls and / or SMS messages. The memory locations of the numbers 1 through 8 are programmed by factory with a standard combination of alerts that need to be sent. In order to get the type of alerts to each phone number you wish to receive store numbers by following the diagram below.
- Locations 1 ÷ 4 have the same settings and are able to receive vocal calls and SMS messages for alarms and technicians. Programming MOBILE PHONE NUMBERS ONLY in these locations.
- Locations 5 ÷ 8 have only to the alarm vocal calls, they only work with fixed-line numbers, emergency and mobile phones.

N° Tel.	SMS	SMS	SMS	SMS	SMS	SMS	SMS	Voice Calls
	Arming Status	*Alarm*	*Panic*	*TeleAlarm (silent)*	*Supervision*	*Power Status*	*Battery Status*	*Alarm Panic Telealarm*
1		X	X	X	X	X	X	X
2		X	X	X	X	X	X	X
3		X	X	X	X	X	X	X
4		X	X	X	X	X	X	X
5								*Only alarm*
6								*Only alarm*
7								*Only alarm*
8								*Only alarm*

Factory settings for notices to telephone numbers.

SMS

- *Arming Status*: for each arming / disarming event an SMS is sent with information on the new state of activation of the alarm system.
- *Alarm*: signal for alarm in progress.
- *Panic*: notice of activation from special PANIC remote control.
- *Telealarm (silent)*: notice of activation from special TELEALARM remote control.
- *Supervision*: information for proper functioning of (monthly) internal GSM modem.
- *Power supply Status*:
  - *Power line:* Notice of failure / power supply recovery from power line.
  - *Battery status*: low battery status indicator.

Vocal

- *Voice calls*: warning alarm function, panic or telealarm via vocal calls.

WARNING - Customized programming
Programming of the phone numbers (association with alerts to individual numbers) can be completely customized via software (only for installators).

MESSAGGE DISPLAYED DURING THE SENDING OF SMS ACTIVATION, ALARM and PROGRAMMAING

10.2. SMS PIN Code

The control panel – equipped with an active SIM – is always ready to accept commands via SMS. To be accepted by the control panel, these messages must contain a security code modifiable by the user (the SMS PIN CODE). This ensures the security from possible sabotage attempts by unauthorized parties.

The default combination code setting is:

0000 (four zeros)

and can be modified by the user / installer

> *FOR SAFETY REASONS BE SURE TO ALWAYS CHANGE THE FACTORY SMS PIN CODE WITH A ONE OF YOUR OWN (SEE PARAGRAPH "ACTIVATE INSTALLER MENU").*

> *In case of alarm> first will start all vocal call then all SMS messages are sent.*

10.3. Add telephone number to the control panel

To program the phone numbers that the GSM dialler will send alerts to and accept commands from, proceed as follows.
The first time you turn control panel on, the phone numbers memory of the GSM dialler is empty (it is assumed that the parameters have never been set ex. via software).
Since the factory combination code is the same "**0000**" (four zeros), the control panel will accept commands from any mobile number that sends a command with "**0000**"(four zeros) as SMS PIN Code.

> *The SMS commands contain spaces within them that are considered part of the syntax, therefore, MUST be inserted as indicated*

From a mobile phone send the number - to the SIM card number of the control panel - by an SMS message for **each number** memorized.
The SMS message **must** to be written in like this:

xxxx#num n qqqqqqqqqq

where:

xxxx	Security SMS PIN Code
n	Memory locations from 1 to 8
qqqqqqqqq	Phone numbers memorized should follow the international county code without using 00 (e.g.: for U.K. is 44)

Example: Mr. Rossi wants to program his own mobile number (333.44.44.444) in his new control panel CE 60-3 GSM, so that he receives an alert in case of a burglary or other event, allowing him to manage the situation remotely.
He will send the control panel phone number, the following SMS:

0000#num 3 443334444444

The control panel SMS PIN Code is "**0000**" (default).
The mobile phone number 333.44.44.444 (the digits 44 were put in before the number for calls from an U.K. phone) it will be memorized in location number 3.

From this moment on Mr. Rossi will be able to receive vocal calls or SMS from the control panel.

It is also possible to program the dialler to make calls to landlines.

> *The memory locations from 2 to 8 can have both GSM and fixed network numbers. The memory location number 1 is special and can only have a GSM number (the SIM expiration is only sent to this number).*

Example: In the case of an alarm Mr. Rossi wants to receive calls, from the control panel, on a landline 011.77.55.333 (it could be the number of a second home or his relatives); he will program (as he did in the previous example, via SMS) the control panel with the number as follows:

0000#num 6 440117755333

10.4. Public emergency number

It is possible to program public emergency numbers (example: 112, 113, 118…) in the same way as the other numbers, just by OMITTING the international country code:

Example: Mr. Rossi would like to program the number to the Police:

0000#num 5 113

10.5. Deleting phone numbers

xxxx#del *n* To delete number memorized in location *"n"*

10.6. SIM credit request

xxxx#riccre Start the SIM credit request with the telephone operator: the control panel with reply with an SMS of the credit amount left.
In the case of a failed connection, the control panel will send "No operator response try again later".

10.7. Setup SIM expiry alert

Set the number of days after which the control panel will send an SMS alert for the SIM expiration. If the number of days is set to "0"(zero), this service is disabled.

xxxx#scad yyy Set a reminder for SIM expiration between yyy days.

> ***Resetting timeout SIM expiration***
> *The notice of SIM expiration will be sent from the control panel ONCE ONLY (at the end of time set) and ONLY to the first number stored in the internal dialler.*
> *Once it expires, it is not restored automatically; you will need to manually RESET it.*

10.8. Programming SIM credit request

Commands which can be sent via SMS to the control panel to check the residual credit on the SIM card – done by the user from the control panel or via SMS – can be viewed below.

> *The setting depends on the phone company that provides the SIM.*
>
> *You cannot use SIM operators that require UMTS technology.*

All commands must begin with the SMS PIN Code (4-digit code, "**xxxx**"): the default is "**0000**" (four zeros).

Programming command	SIM Type
xxxx#cre c	SIM contract.
xxxx#cre t yyyyyyyyyyy	Rechargeable SIM with credit request done by a telephone call to the number "yyyyyyyyyyy". Operator will respond with an SMS. example 0000#cre t 404
xxxx#cre s yyyyyyyyyyy testo	Rechargeable SIM with credit request done by sending an SMS to the number “yyyyyyyyyyy”. Operator will respond with an SMS. example 0000#cre s 40916 CREDITO
xxxx#cre f yyyyyyyyyyy	Rechargeable SIM with credit request done by a telephone call to the number "yyyyyyyyyyy". Operator will response with a flash message example 0000#cre f *123#

11. VOCAL MENU

WARNING - Vocal Menu and programming relay as RING

The AUX relay <u>should not be set as a RING</u>, otherwise the call to the control panel will be used to activate the relay and the vocal menu will be disabled.

It’s possible to call the SIM phone number of the control panel, to use the vocal menu: a voice will propose an action that is preformed, if you press the corresponding button on the phone keypad.

For more details, see USER'S GUIDE.

12. POWER ALERTS

The control panel continuously monitors the power status of the 230 V_{AC}, of the backup battery and the on-board sensors battery stored in the control panel.

12.1. Sensor Low Battery

Type of notification **>** If the system is disarmed:
Display = “Low Battery” + Flashing red led ***L1***
An alert via SMS (sensor name + “LWB”).

Alarm Memory **>** Displays the name of the sensor with an indication on the side “LWB” (low-battery).

12.2. Control Panel Low battery

Type of notification > Display = “Low Battery” + Flashing red led ***L1***
(*when power line returns there is no signal on the panel*)

Alarm Memory **>** Displays “Low Battery”.

12.3. No Network

Type of notification > Time elapsed with no network:
Display = “No network” + Flashing red led ***L1*** + Green led off ***L3***
An alert via SMS (“No network”).

Alarm memory **>** Displays “Power Line OFF” and “Power Line ON”.

13. OPEN DOOR ALERT

The CE 60-3 GSM can inform the user of an opened door. To get this information, the technician must enable the "Doors Control" in the INSTALLATER MENU.

When the function is disabled

- In disarmed mode, the panel does not indicate the presence of sensors with open contacts.
- When arming (Total, Partial or External) there will be no signal and eventual sensors that have remained "open" will automatically be excluded.With an armed system as soon as the contact is closed it automatically will be re-activated: at this point its re-opening would be cause an alarm condition.

When the function is activated

- In disarmed mode the control panel will signal an "open door" with flashing yellow light (***L2***) when one or more wired and/or wireless CTSR sensor have an open contact.
- During arming (Total, Partial or External) the control panel will emit an acoustic signal for about 10 seconds, in which you must take appropriate action (*otherwise the alarm will be triggered*):
  - Closing the opened door/window within the time of warning and of exit;
  - Stop the arming using an activator.
  - The panel will show the message "OPEN DOOR": pressing "#" it will display a list of sensors that caused the alert.
  - Force entry with the large button on the TXS remote control.
    The control panel will not generate an alarm, it will arm in desired mode (Total, Partial or External) **excluding the zone that alert for “Open Door”**.

The signal for open door in the wireless zones is given to the control panel by the CTSR sensors (see SOFTWARE MANUAL, "Configuring Wireless Zone"):

- when both contacts (reed on board + external contact) appear open at the moment of insertion (*the "Single Contact" option is disabled*);
- when the reed on board is open at the moment insertion (*the "Single Contact" is enabled*).

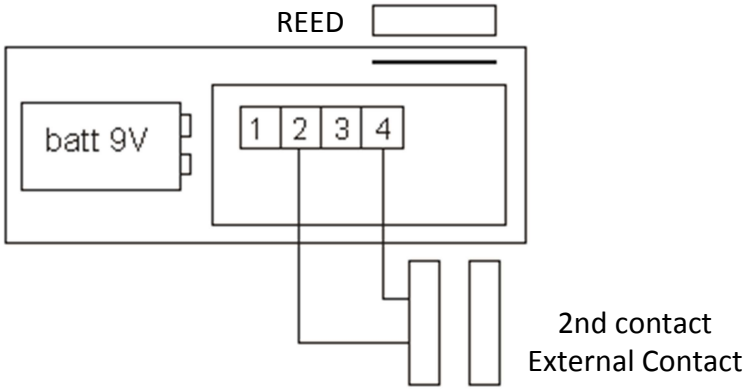


Diagram of REED contacts of CTSR sensor model

14. CONTACT ID

The control panel support the Contact ID protocol.
The system is compatible with SIA DC09 standard.

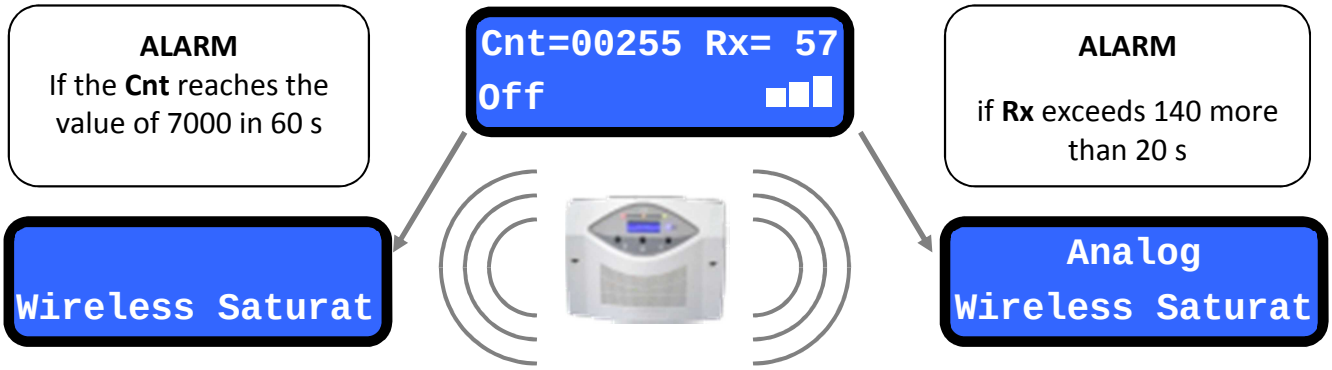
> *See the Software manual in the CD included.*

15. SATURATION RADIO TEST

The CE 60-3 GSM control panel allows a test to analyse the "quality" of the environmental for radio waves.
Being able to be in the installation area one or more sources of radio emission (temporary and/or fixed, whether intentional or not) with the same type of communication as the control panels frequency (which may affect the proper communication of the security system, causing blindness) with this test it's possible to detect the presence of strong signals on radio frequency and determine whether they are compromising the proper functioning of the control panel.
The test generates a particular alarm Sound lasting 30 seconds when:

- a strange radio signal of a frequency equal to that of the control panel and of a higher power exceeding a maximum threshold (ANALOG carrier), is present continuously for more than 20 seconds in a time span of 30 seconds.
  The control panel display indicates "**ANALOG WIRELESS SATURATION**".
- a MODULATED DIGITAL radio signal, quite similar to the work of the station has transmitted 7000 digital values in a period of 60 seconds (after which the counter restarts from zero).
  The control panel display indicates "**WIRELESS SATURATION**".

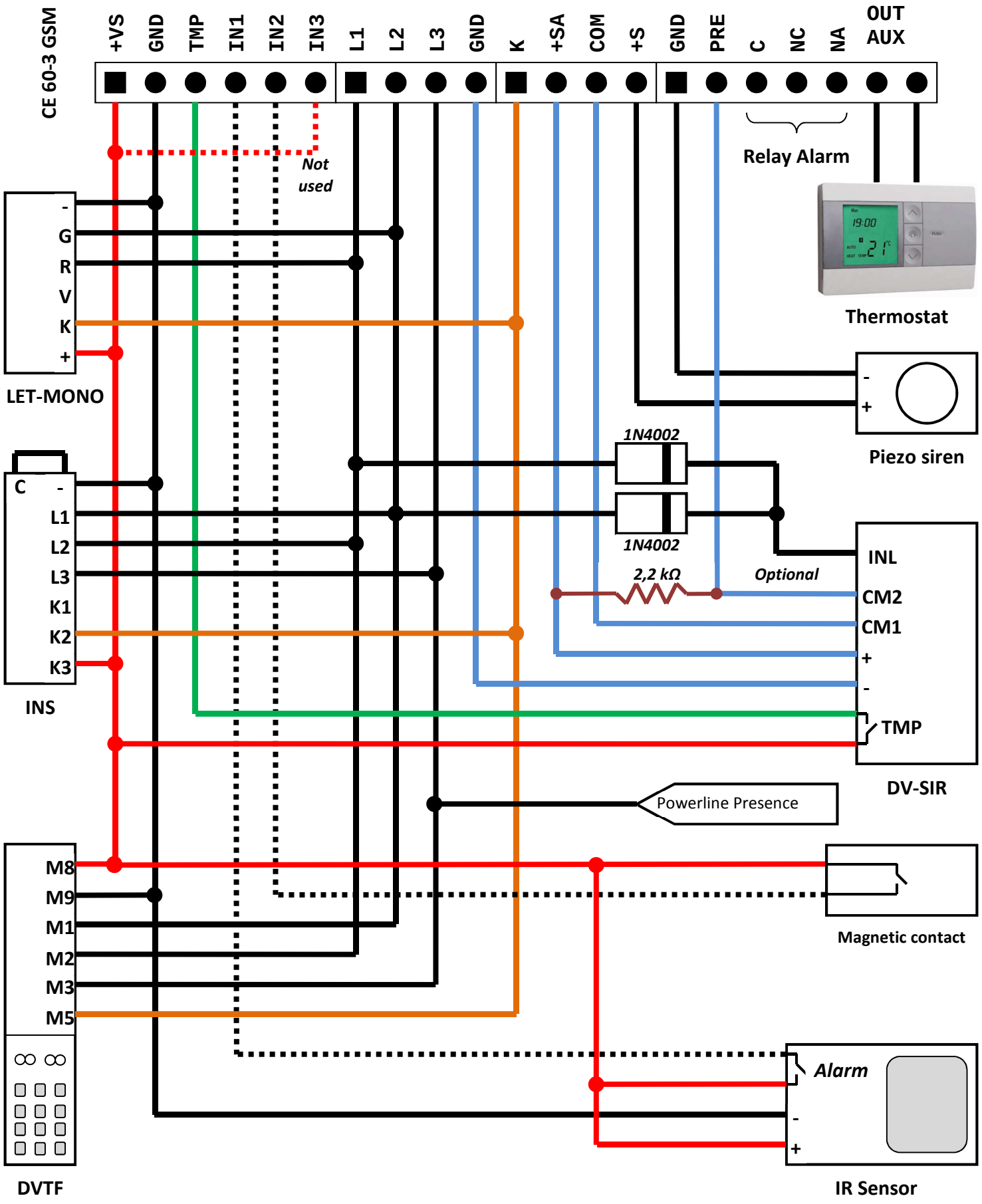
Activating this mode from the USER MENU or INSTALLER MENU the display will indicate (*for the duration of the testing*) the amount reached by the digital counter (CNT) and the level in real time of power from radio waves received (**Rx**):



The signal "**ANALOG WIRELESS SATURATION**" or "**WIRELESS SATURATION**" not being a real alarm, will not be stored in the event log.
This feature is enabled/disabled either from the user menu or from the installer menu: when started, the function remains active, switching off automatically after 2 hours.
The CE 60-3 GSM continues to operate normally even in testing: you can arm and disarm.

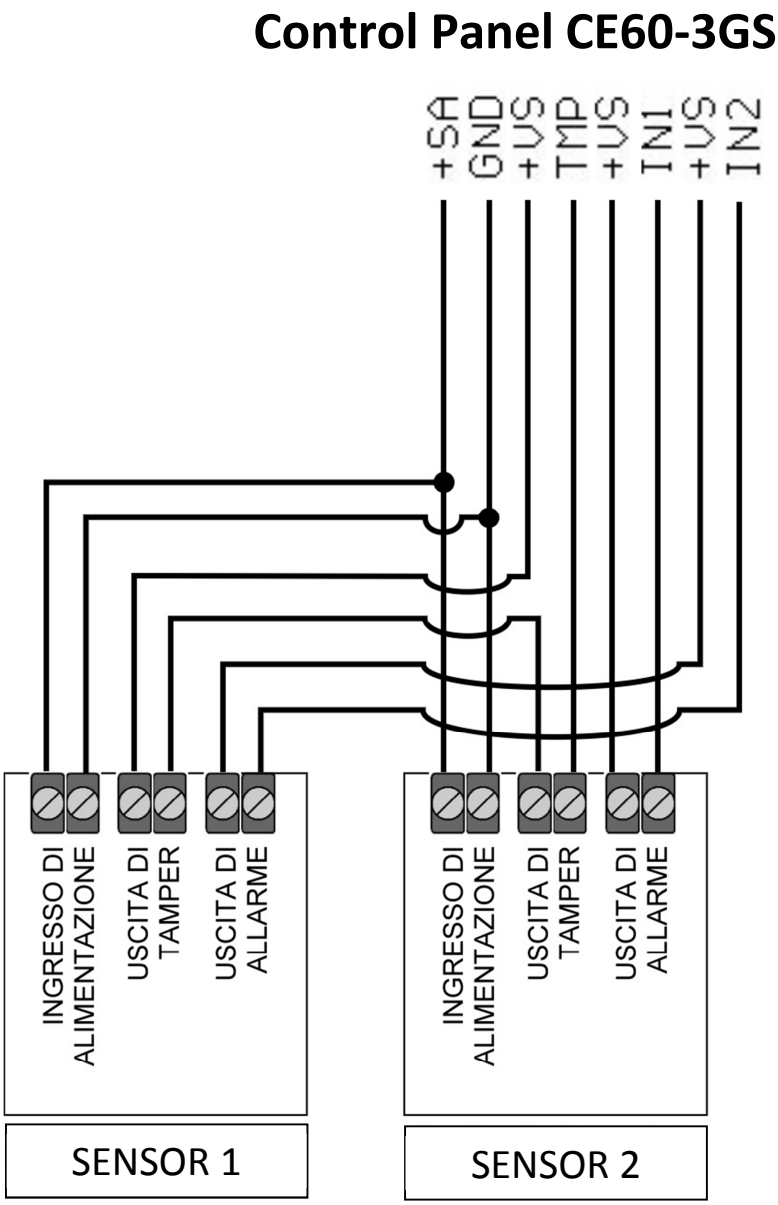
16. ELETTRIC DIAGRAM

16.1. Main Diagram



16.2. Wired Generic sensors

It is possible to connect wired generic sensors to the control panel using inputs ***IN1***, ***IN2*** e ***IN3***.
These sensors must have a NC (normally closed) alarm output in order to be used with this control panel.
For connection, refer to the instructions of the sensor and the following diagram:



WARNING

ONCE THE SENSORS ARE CONNECTED, BE SURE THAT THE INPUTS USED ARE ACTIVATED (they could still be programmed as DISABLED).